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Correlating Nature Study.

By *Edward F. Bigelow, Stamford, Conn.*

"Oh, yes, we know all about correlation, we have had full instructions, read topical outlines and schedules in our teachers' journals, had it reiterated to us at the Institutes, seen it advocated in the schedules of nature study for each month, and, therefore, we know all about it. Of course we correlate nature study. We correlate it with drawing, language lessons, writing, and even with arithmetic and geography, so we are all right on that—and we don't need any further instruction."

But wait a moment, Miss Teacher. If you really have correlated nature study in all those ways and insisted upon it in all cases, you have done exactly what you should not have done. You have shaken water and oil together and made a compound, good neither for lubricating nor for quenching thirst. Or, to use another comparison, you have flavored a dose of castor oil with wintergreen and made a mess. You may have helped the oil, but you have made it mighty bad for the wintergreen!

But have you really been using "Nature Study" that is original investigation on the part of the child? Haven't you simply used a few natural objects in the various kinds of work that you have mentioned? If so, and, I really hope it is so, you are after all not guilty of spoiling the wintergreen.

Not long ago I attended, in the high school assembly-room, an exhibition of the work of the grade schools in the town. As I entered the hall, a supervising teacher came forward and said, "I am so glad you came; I know you will be interested in everything, but I want especially to show you what we have done in nature study, I know you are interested in 'such things' (sic)."

And, indeed, I was interested, and proud too of the good results attained by the schools, for the exhibition showed various lines of work that were truly remarkable.

"There," said my fair guide, as we approached a particularly attractive table, "I know you'll like this. See; isn't that beautiful? How well our children do it! Isn't it surprising? Don't you think they've done well?"

Truly it was a beautiful exhibit; the children had done well. I said so frankly, and expressed surprise that so excellent work should have been accomplished by children who were so young, as shown by their ages marked on the specimens.

"Aren't you glad that our schools are doing so good nature work?" exclaimed the enthusiastic teacher.

"Nature work! Where is it?"

I was not diplomatic, I know, from a social standpoint and with such an interlocutor and after so cordial a greeting. The words slipped out without a second thought.

"Here, here; what are you thinking about? This nature work; isn't it beautiful?"

"Yes, it is beautiful drawing, neat writing, correct capitalization and punctuation," I hesitatingly equivocated, as I picked up a prose paraphrase of Bryant's "Fringed Gentian," decorated with "original" drawings. There was at the end even a little angel with wings, and an anchor with a chain gracefully twined around it.

Hope blossoming within my heart,
May look to heaven as I depart.

Then came Emerson's beautiful fable of "The Mountain and the Squirrel."

The mountain and the squirrel
Had a quarrel;
And the former called the latter "Little Prig;"
Bun replied
You are doubtless very big.

I didn't read the rest, but I am sure the mountain backed out of the fight, if I may judge from the attitude of the squirrel and the expression on its face. It was artistic, and certainly artistically realistic from the child's standpoint.

Then appeared "Seaside and Wayside" stories retold with drawings, almost as good as the originals.

Perhaps the most attractive was the work in water colors. A bouquet of roses painted by a child eight years of age was indeed remarkable, and so I went over the drawings of daisies, maple keys, wild geraniums, dogs, and horses. I felt just a tinge of disappointment when I saw that the flowers had been drawn in the winter term, some with the aid of outlines on the sheets, and had been colored *ad libitum* or by the direction of the teacher.

But nevertheless it was all good work in drawing and language, most of it having been made from outlines and books, while only a few samples had been made directly from nature.

The trouble was that I was talking to the nature supervisor and not to the teacher of drawing or of language, and my questioner was persistent. She repeated, "Don't you think this nature work is good?"

And so I was forced to state, as I do to you, that it seems to me that the mere drawing of natural objects and writing about them, even if from the objects themselves, isn't necessarily nature study. Even a talent for original seeing, a love of natural objects may be at least stunted by the requirements of drawing and writing. The wintergreen seemed to be pretty nearly all castor oil, judging by the taste. You can correlate nature study in this manner till there isn't any nature study left.

Professor Hodge in his "Nature Study and Life" (I like especially that word *life* in the title) tells us regarding the experience of the children in rearing plants.

"No skilled gardener can even tell, much less write down, a hundredth part of what he knows about plants. . . . It was thought at first that the children might be induced to keep diaries or records of their plants, giving just what they did and just how fast the plants grew; but it was found that their writings were of little value, and were even thought to act as a chill to the spontaneous interests of some of the children. Some children have a passion to write, while in others the very thought of writing seems to benumb every impulse." The author's italics are expressive.

But if you must correlate nature study and language exercises—and there are some teachers who will persist in it—never lose sight of the original-seeing nature study. It is bad for the wintergreen anyway and you will surely "swamp" it in an over proportion of castor oil.

Then, again, be sure that you know which is nature

study and which is the drawing and language, and just wherein is the correlation—perhaps it is annihilation, or a mistake in identity. It is bad when one doesn't know "t'other from which" as the young drug clerk in Hartford found to his sorrow, when going home late one night he picked up some Angora kittens, put them in his pockets and carried them home. A rare find! They can be raised and Angora cats sell for a big sum!

It was a case of joy in mistaken identity. He thought he had Angora cats in miniature. His friends at home and the remarkable odor from his pockets, finally convinced him that they were not true Angoras. And no amount of belief to the contrary on the part of that city-bred lad could make Angoras out of skunks. Skunks they were and skunks they persisted in being.

Not long ago I had occasion to examine several hundred letters from children engaged in a contest of nature-study writing and drawing. Please note that it was nature study writing and drawing—not a contest on writing and drawing nature study.

Among the many letters was a particularly attractive package of eighty, all from one school. "Here's the prize," I thought, as I cut the pink string and opened the neat foldings of firm manila and the pink tissue paper within. The letters were written only on one side of the paper and not folded, which alone was enough to make them especially attractive to an editor. What beautiful vertical writing (not that I am especially an advocate of that system), but because it was so perfectly legible. It was a pleasure to read them. And the capitalization and punctuation? All perfect. Then, too, what beautiful drawings. I envied the child whose letter I first picked up. So neat and pretty. After my hard work over nearly a thousand just laid aside, this lot was indeed refreshing. But when I had thus enjoyed about a half dozen there began to creep over me a feeling that I had somewhere previously read that last one, and not so long ago, either. Then I studied them with keener interest and with growing amazement. How could so many children have ascertained certain facts with a clearness so uniform, and have described them in expressions so similar? It was bewildering. Eighty of them, and all cut on the same bias. But that bias was really bright and fresh. I couldn't gainsay that.

After I had read about two dozen my mind recalled my visit to a factory in Waterbury where I saw a coil of wire fed into a machine and reappear as a stream of glittering pins that were rolled around in a "hopper" and

shot out of a spout neatly arranged in rows on paper. Some enthusiastic teacher had correlated a coil of a "nature-study" story into a school machine and the hopper had evolved attractive language-pins beautifully arranged on eighty papers, and then, alas and alack! she sent them to me. The thing I wanted wasn't there. So near and yet so far, and so much mistaken. In sadness I laid them aside.

Next I picked up an unattractive letter written on the leaves of a pocket note-book. The drawing that accompanied it was crude and the paper was soiled by finger-marks. With difficulty I read it, but I was fascinated as I deciphered the story of a boy's seaside investigation of the fiddler crab. He wanted to know how they lived underground; what they did; what food they ate; what kind of cozy quarters they occupied. He made inquiries of the fishermen. No one knew. He said, "I'll find out if it takes a week." He borrowed pick, shovel, and crowbar. He went to work and he found out. Then he wrote the story as he sat beside the hole that he had dug after several hours' hard work. He made the drawing after careful watching of the living object. He wrote the article on the field of battle, where the weapon was a spade, the enemy a crab. I was sorry that I had not a basketful of prizes to give that boy because he wrote his letter for the love of it, and not for a reward, of which he knew nothing.

The story of a little girl's watching the sexton beetles burying a dead snake "hour after hour, with her little rocking-chair and parasol, in the broiling hot sun," as her mother expressed it in a letter written without the child's knowledge, showed nearly as much determination to find out things, and the description was good enough for second prize. The drawing like a huge letter S was explained to be "the snake;" two little rings like miniature pennies, were explained to be "the beetles." It was charming.

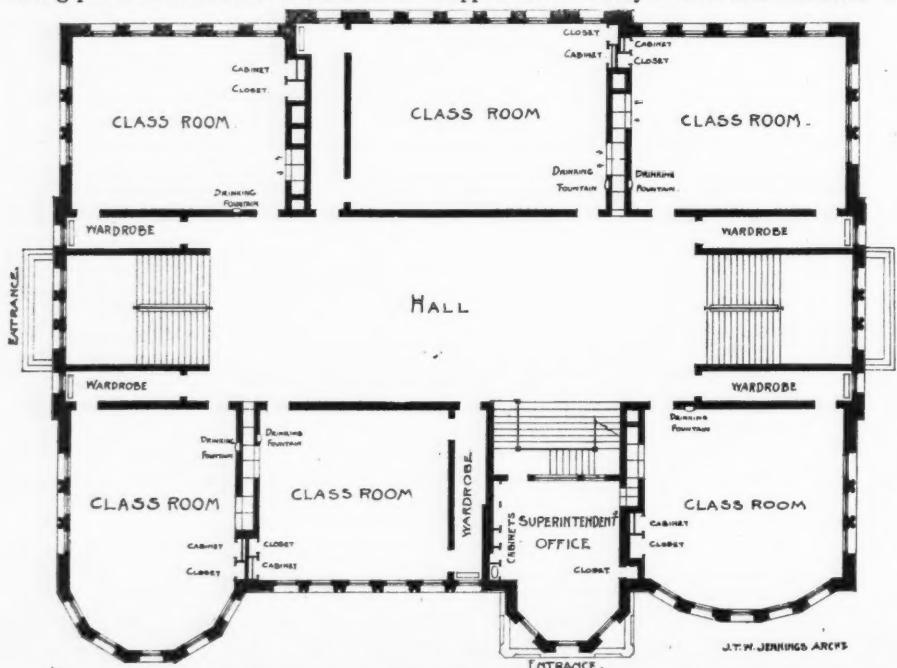
I found some others nearly as good, which lost high rating by only a slight deficiency of the right spirit; such letters were a prize in themselves, but I am sorry to say that in numbers they were small. The greater part showed too much correlation of language-work and drawing. The nature study, if indeed there ever was any, had been buried out of sight. Yet many accompanying letters from parents and teachers showed that the importance of nature study was fully appreciated.

Thus, you see, there is danger of correlating nature study until it is annihilated. You can't taste the wintergreen.

Secondly, there is danger of thinking that you have some nature study and some drawing when you really have none. You have put the castor oil in a tumbler slightly perfumed with wintergreen.

There is a third danger in deluding yourself into a belief that you have nature study where there is not a vestige of it. You have merely used natural objects in certain school work. The bottle of wintergreen was on the shelf from which you forgot to take it when you administered the dose.

"But do you mean to say," inquires the reader, "that we shall not correlate nature study with language-work and drawing?"



Lincoln School Building, Evanston, Ill.—84x120 feet. \$45,000.

Yes and no. It all depends upon where you stand and what you do and how you do it. You may find natural objects useful in your language and drawing lessons, but don't let it end there. Have some nature study sometimes uppermost in mind—with or without language lessons, according to circumstances and the preferences of

the pupils. "These ought ye to have done, and not to leave the other undone."

All these things are from the negative point of view—the prohibitive or cautioning. The positive also exists where there is no danger of correlating too much.

(To be continued next week.)

How May the Work of the Principals Be Made More Efficient?

By Prin. ELLA BEISTEL, Dayton, Ohio.

[Part of paper read before Dayton School Principals' Association.]

It requires firm poise to maintain one's equilibrium when a man in authority chuckles in recounting the open disrespect shown by a principal towards the suggestions of his superior in office; or when, in teacher or principal, the exhibition of professional courtesy is termed "toadism," or when adherence to fossilized theories or "misfit methods" is styled "independence."

These things ought not so to be. They demoralize the schools. They weaken our efficiency; they diminish our worth, for they touch character vitally.

The newspaper recorded the fact that on the 12th of April last the "principals of one hundred and fifty schools in Chicago had formed an organization to act as a medium between the superintendent and the teachers." They "resolved" to "support the school administration." Their example is worthy of imitation. If "resolution" be necessary, let us here, now, mentally "resolve" to do likewise! In the language of another, when speaking of a different matter, "It would not be a very big thing to do, but it would certainly do a very big thing."

If we lack the qualifications of educational leaders, let us be content to be followers, and let us cultivate the spirit of true disciples.

We expect, we demand consideration, courtesy, obedience, loyalty, and no power can cancel our obligation to accord these where, in the very constitution of things, such tribute is due.

Compliance with any requirement made, however objectionable to us, is not so harmful, is not so far-reaching in its pernicious influence, as is an example of disobedience, disloyalty, or even indifference on the part of a principal.

Honest differences of opinion indicate healthy, intellectual activity, and they need not interfere with the duty of obedience. "Independent thought is compatible with the most hearty loyalty, and is a trait of character to be respected and cherished," according to Dr. Payne.

Willingly or unwillingly, consciously or unconsciously, we are in a large measure responsible for the spirit of our teachers. If we are in deed and in spirit co-laborers, the entire school feels the power, the uplift, of harmonious enthusiasm. Mrs. Young asserts that "the level of power in the educational system is determined by the degree in which the principle of co-operation is made incarnate in developing and realizing the aim of the school." And when a teacher stubbornly refuses to enter into this communion and co-operation, and tries to counteract its influence, the principals should collectively endeavor to relieve the schools of the incubus, instead of trying, respectively, to foist her upon another district. She should be eliminated from the corps by the substitution of one in sympathy with the work and the workers.

Sometimes the reported action of the board or the recommendation of the superintendent, tho susceptible of liberal construction, of generous explanation, is so bald a statement as to seem an exacting demand or a useless requirement. We may not always be "spontaneously convinced" of the feasibility of plans proposed or of the wisdom of measures adopted. But the "altitude of active inquiry" should take us to the source of information. From the view point of those who wrestled with the conditions, we may learn how to give the proper interpretation so promptly that erroneous opinions will not get started beyond recall or correction. We may learn how to argue a case so forcibly as to disarm current criticism. "The old order changeth," and the new is not necessarily worthless because it is new.

To the virtues of obedience and loyalty we must add sympathy, appreciation, and progressiveness.

We need to live in "the region of high purposes," and to make a thoro study of the great educational problems that are receiving the thoughtful attention of the foremost minds to-day, if we are to be able to interpret our school work and the school system to teachers and patrons, if we are to quicken and inspire to higher effort for the good of the school, all connected with us.

Now and then when the Auntie-Doleful type of teacher—the "keen-eyed in fault-finding while blind to embryonic good"—has made to me her stereotyped complaint of conditions in her class—of Tom's inattention, Dick's meanness, or Harry's ignorance—and has implied the shortcomings of his former teacher I have inquired, in a manner meant to be impressive, "What have you done, what are you doing to overcome this?"

It would be better for all concerned—for the harassed teacher, for poor Tom, Dick or Harry, for my school, and for myself—if I were more fertile in resource and less severe in retort—better, if I could suggest plans for trying to overcome a specific difficulty in discipline or instruction, if I could suggest some methods in harmony with child nature and based upon the principles and laws of mental growth—methods that would not merely enable her to maintain order or impart knowledge, but to train the child into self-control or to inspire his interest and arouse thought.

I not infrequently confront perplexing conditions that stubbornly refuse to mend themselves. A careful study of a situation sometimes convinces me that I do not understand the conditions clearly enough to deal with them confidently, successfully.

Do I stand utterly alone among you, in being forced by my own ignorance into experiences, and a confession, so humiliating?

Of the educational value of some phases of our work we are so doubtful that we can argue little in its favor (as our perplexity over certain required reports attest.) Of other features we are barely tolerant, and some we "damn with faint praise."

Is this because we see only "thru a glass darkly," when we should "see face to face" with the vanguard of the educational army?

Have we made a study of these features? Have we tried to understand their worth? Have we done all we could do to make them, in the highest degree, successful?

Or have we let the teacher severely alone to wrestle with difficulties whose solutions we declined to attempt? And have we then condemned, because we have taken her halting progress made in partial blindness, for the real thing that informed skill could and would achieve? If so, not knowing how much our indifference has hindered the attainment of better results, can we render just judgment of their intrinsic merit?

If we are to stimulate the brain centers of pupils; if we are to inspire teachers with a desire for better things and assist them in the attainment of their aspirations; if we are to unify more than a score of schools as they should be, by a unity in aim; if we are to help in cultivating a healthy public opinion in favor of the things that make for good schools and for richer life to our pupils,—our minds must be informed, our professional horizon must be enlarged, and enthusiasm for our work must by us be religiously cherished and constantly kept aglow.

Chalk Talk in Geography. II.

WHAT SHALL A MAP CONTAIN?

By WALTER J. KENYON, State Nor. School, San Francisco.

There has been some discussion as to what a map for elementary school use should contain. The diversity of belief in this regard becomes apparent in a comparison of the maps in various leading text-books. In some of these the continental reliefs have been divested of every feature that gives them the *feeling* of land masses.

This elimination of detail may easily be carried too far. A good map is not entirely symbolic. It is to some degree a portrait of the area dealt with. If by our eliminations we obliterate the characteristics of the area, our map wastes the paper it is printed upon. The lakes of the Hudson bay region, for example, are of a minor importance economically; and a very good geography course might be given in which the pupil never so much as repeated their respective names. These lakes should nevertheless appear on the map, because they strongly characterize that area, and are full of meaning to any eye, taught or untaught. It is one thing to omit mention of natural features in the text. It is quite another to leave them out of the map.

The same is true in the case of minor rivers where they occur in groups, as in our Atlantic slope. To the eye they tell a silent story that we cannot afford to leave out. But the text may profitably leave many of them unnamed.

Again, portraiture is dealt with in coast lines, where it is indeed most often overlooked in the so-called simplified maps. A map that defines the coast of Norway in the same smooth line that is adapted for the Baltic shore loses a golden opportunity for telling a fundamental bit of geography in a simple way. Nor can this sterilizing tendency be excused by any tenet of pedagogy. No one would think of plucking out the hairs from Lucy's kitten that the child might behold a simpler entity in her pet. Naturalism is always a safe guide in the graphic presentation of thought material for childhood.

Some "Don'ts" in Pictured Relief.

1. Accented Coast Lines.

One's first impulse is to strengthen the coast line so that it stands out as an object in itself, instead of just a place where two surfaces come together. In a properly finished map the coast line should not show. This error is shown along the Gulf coast, *a*, in Fig. 15. Compare it with the corresponding coast in the correct map, Fig. 16. The remedy is to use a soft, sketchy line in first mapping out the continent, and to let it go at that.

2. Meaningless Scallops.

Amateur mappers in drawing a coast line are apt to *wiggle* the crayon with a vague idea that coasts run that way. The result, *b*, is entirely without feeling. The best way of avoiding this mistake is to think of the particular stretch of coast as you draw it: Is it a rocky, deeply indented fiord coast as in Alaska or Norway, or a succession of softly curving beaches, as on our southern Atlantic seaboard? Try to image the region as you draw it.

3. A killed coast line.

Having just discussed this point there remains only to illustrate it. In Fig. 15, *c* shows a killed coast line. To be consistent the cartographer advocating such departures must kill his rivers also—stiffen them into walking sticks instead of meandering streams. How can he avoid it! Singularly enough his maps adhere painstakingly to the truth in the matter of length and breadth. Yet, as to the value of data, let us contrast:

1. North America is 5,700 miles long and 3,200 miles wide.

2. The fiords of Alaska are unlike the sandbars of Carolina.

Now, why should a map for elementary school use be insistent about fact 1 and carefully eliminate fact 2?

4. Omission of plateaus.

In a land mass the big thing is the plateau, not the mountain. This is true whether we consider merely their respective bulk or their economic aspect controls. Notice at *d* the mountains seem to rise abruptly out of a lowland instead of a plateau or tableland. In other words the Utah plateau is made to look exactly like the Mississippi bottomlands. If this mistake were shown in profile it would appear as in Fig. 17, while the correct idea (save of course for vertical exaggeration) would be better served by Fig. 18.

Think, therefore, of the plateau rather than the range. Look for the plateau in your text-book map. If it is a good physical map, with a color scheme, the coloring will show the plateau area. A good text-book map, carefully studied, is the equivalent of many pages of print.



Fig. 15.—A Budget of "Don'ts."

5. Chopped-off Ranges.

No elevations save foothills ever abut directly upon a lowland. Nor do we ever find sea level plains breaking principal ranges. The yawning blanks at *e*, Fig. 15, are a mistake in both idea and expression. The great continental ranges are nowhere broken up into these choppy masses. It is true there are passes. But these are not sea-level gaps, they are thousands of feet in altitude. Keep in mind the continuous plateau and there will be no



Fig. 17.—Where is the plateau?



Fig. 18.—The plateau, not the mountain, is the big thing.

inclination to leave these impossible blanks. A good way of beginning is to rub in the plateaus in a flat white tint, regardless of mountains, as in Fig. 19; and build in the mountains later.

6. Rivers cut off.

A common fault in pictured relief is to start a river a thousand miles or so short of its true source, as at *f*.



Fig. 16.—North America, as it ought to look.

This seems to arise from a lack of understanding of the relations of mountains to rivers. No good-sized river (save the Volga) takes its rise in a lowland. On the contrary, the upper waters of such streams are apt to flow for long distance between closely confining ranges.

Thus the mountains, if correctly placed, help us to place the rivers, and vice-versa. 7. *Streams without taper.*

It requires but a glance at the text-book map to see the rivers beginning at their sources as fine lines; and thence gradually augmenting until, in their lower courses, these lines have considerably more body. Simple and expressive as is this device, the tyro will often overlook it and make her river look like a bent poker, as at *g*. It is sometimes worth while to practice drawing rivers, apart from the map, until two things are accomplished: The said tapering from source to mouth and a natural meandering, instead of the meaningless wiggle shown at *h*.



Fig. 19.—Rub in the Plateaus, regardless of Mountains.

THE SCHOOL JOURNAL,
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Milton's Tractate:*

A Voice from the Past.

By WILLIAM L. FELTER, Brooklyn.

There is a natural inclination when Milton's name is mentioned to think of his poetry or of his work in establishing the Commonwealth. When the brilliant Macaulay reviews a translation of Milton's treatise on Christian Doctrine he improves the occasion to tell us about the character and influence of Milton's poetry, and so the famous essay on "Milton" begins with a reference to the newly published treatise, but the greater part is devoted to a discussion of poetry in general and of Milton's in particular. To quote a sentence from Macaulay: "It is by his poetry that Milton is best known." By an infallible association of ideas we must unite in thought work with its author, and, as "Paradise Lost" is by common consent regarded as the greatest epic of our language, we must ever have in mind, not only the movement of celestial and infernal beings as they are set forth, but also of the aged Puritan, of whose fancy they are the creation, and who saw more of heaven with his sightless eyes than most of us do with ours wide open.

Not that "Paradise Lost" is the only poem of which we think. "Paradise Regained" comes to mind, as does "Samson Agonistes," his drama modeled on Greek lines, with the unities of time, place, and action duly observed. That outburst of passionate grief, "Lycidas," that charming and purposeful "Masque of Comus," those beautiful studies in antithesis, "L'Allegro" and "Il Penseroso," and the majestic "Hymn of the Nativity,"—these all come trooping into the mind when Milton's name is mentioned.

But we may think of his public services as well. Milton lived in a golden age of hope and energy. There was throughout the nation a confidence of strength, a readiness for great and stirring deeds. Behind the people lay two great ages—the age of Reformation and the Elizabethan age. Nearly a century of spiritual freedom, many years of glory and prosperity, and a newly acquired treasure of literature had enlarged their minds and filled them with confidence. They intended to add a third great age to the two great ages that had passed. They pressed on, as Milton says, to reform Reformation. And they succeeded, not indeed in all that they attempted, but in opening a new age.

The reaction did not completely undo their work; the impulse they had given never died out entirely. They let in a flood of new vigor into both government and culture; they inaugurated a time of responsible government, free literature, religious toleration. If Cromwell was the man of action in overthrowing Charles I. and in establishing the Commonwealth, Milton was the man of mind. It was his *Defensio Populi* that justified to all other nations of Europe the beheading of Charles Stuart. It was he no less than Cromwell that fought for the substitution of government by the will of the nation for a government by the will of the king. He labored to widen the idea of religious purity so that it might take the form of religious liberty. His duties as Latin secretary to Cromwell not only brought him into contact with the Protector—they gave him the opportunity of influencing the mind of the soldier and statesman. No history of the Commonwealth can be written without crediting Milton with great influence, direct or indirect, upon events. In the solitude of his study the soul of the poet "was like a star and dwelt apart," but in the firmament of statesmanship his soul and that of Cromwell may well be likened to binary stars.

The Tractate on Education.

Take up any text-book on English literature that comes handiest to you and the chances are that no reference is made to the contribution Milton made to pedagogical literature. Read any extensive history of England where social and intellectual development is treated and the

* Extracts from a paper read before the New York Educational Council.

chances are the same. To put the same statement in another form: it is rarely, if ever, that Milton's "Tractate on Education" is mentioned, either in general history or in a text-book on English literature. And the reason is not far to seek. Historians naturally dilate upon his public services and incidentally mention his great contribution to literature. Critics agree in considering his poetry of much greater value than his prose. To quote from Lowell: "His prose is of value because it is Milton's, because it sometimes exhibits, in an inferior degree, the qualities of his verse, and not for its power of thought, of reasoning, or of statement. It is valuable, where it is best, for its inspiring quality." Moreover, this Tractate is technical and as such it must appeal only to those who are interested in education. But, altho it is insignificant in comparison with his great works, yet it appeals to us as those either actively engaged in the great work of education or intently watching the efforts of others and bidding them Godspeed in their endeavors.

Our task, then, is to study Milton's Tractate on Education and to note its application to the problems of modern education. Not a formidable task this, at least, not for the first part of our undertaking, for the entire Tractate is compressed into the limits of about six hundred lines. In a general way, we may regard the Tractate as one result of the impulse which Humanism gave to education. This has been an abiding force in European education and the great teachers who exemplified its principles have left a precious legacy of which we are, in part, the beneficiaries. True, their successors have modified the original influence, or, to still adhere to our figure of speech, have made new and fresh investments with their legacies, but the original source of wealth must be traced back to the Humanists.

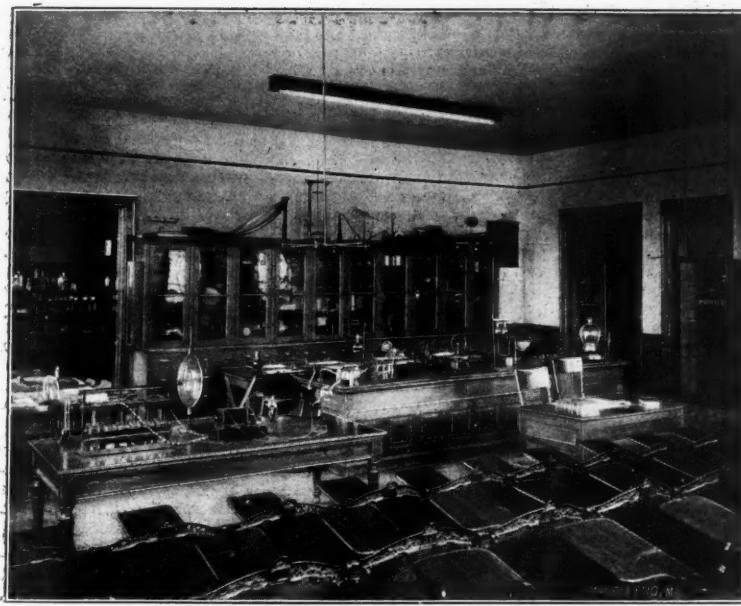
It was in 1644, while Charles I. was yet upon the throne, that Milton set forth his views upon the education of young men in a letter to Mr. Samuel Hartlib, one of the progressive citizens of London.

In the introduction, part I., he declares that the reforming of education is one of the greatest and noblest designs that can be considered, and that the English nation is perishing for want of this reformation. Allusion is made to the visit of Comenius to England in the following words: "I see those aims, those actions, the esteem of a person sent hither by some good Providence from a far country to be the incitement of great good to this island." It was upon Mr. Hartlib's invitation that Comenius went to London, September 22, 1641, remaining there until August, 1642. Parliament thought of assigning to him some college with its revenues, that his plans might be tried. The rumor of an insurrection in Ireland and the sudden departure of King Charles from London frustrated the arrangements.

Entering upon the discussion of his subject, Milton asserts the end of learning to be the repairing of the ruins of our first parents, by regaining the right knowledge of God and by assimilation into his likeness. We shall know Him by studying His works. He thus begins with the objective. Language study is desirable since it is the instrument conveying to us things useful to be known. But too much time is spent upon Latin and Greek words, there are too many vacations, too much attempt to get themes, verses, and orations from children. He suggests a grading of the difficulties and a teaching of the ideas and thoughts of the writers. This gradation applies not only to the teaching of languages, but to all instruction.

Milton's Educational System.

The definition of a complete education is that which fits a man to perform justly, skilfully, and magnanimously all the offices both public and private, of peace and war. This education is to be acquired between the ages of twelve and twenty-one, after the following fashion: An academy in which the students are to live, is to be secured. Spacious grounds must surround it. There are to be one hundred and thirty students and twenty attendants in this academic family, all of whom



Physical Laboratory, State Normal School, Winona, Minn.
Dr. Jesse F. Millspaugh, Principal.

are to be under the control of some wise executive, title not given. The school and university work is to be carried out in this one building, the courses ending in the degree of M. A. Such academies could be constructed in every city in England. The work of the day is divided into three parts, studies, exercise, diet.

The work in studies begins with the chief rules of Latin grammar. The teacher reads aloud to the class some easy and delightful book, as Cebes, Plutarch, and other Socratic discourses. A love of learning is to be inspired, a love of virtue, and a love of country. All these will be accomplished by the reading and the effectual persuasion of the teacher. Arithmetic and geometry come next and are taught largely incidentally. Then come evidences of religion and Scripture stories. The above is the general plan of a day's work for the beginners. The next step leads to more difficult authors, especially those treating of agriculture. The knowledge gained is to be put to practical use in improving the tillage of the country. The constant study of the language used will make the students master of prose. The use of globes and maps, the study of natural philosophy, and of Greek, after the same manner prescribed for Latin, come in order. Arithmetic, geometry, astronomy, and geography are to be completed and trigonometry with its applications begun. A knowledge of medicine is to be imparted by reading. Theorists in any branch of learning are not to be consulted for information, but practical, experienced men.

By this time it is hoped the students are ready for moral philosophy, to be taught by the study of the Greek authors and Scripture. Economics is now taken up, also comedies and tragedies, then politics, then law and legal justice. Sundays can now be given to the study of theology and church history. It is assumed that by this time the students will know Hebrew. Orations are to be committed to memory and logic studied, besides poetry. The rate of advancement in all this work must be uniform, with frequent reviews to refresh and fasten more firmly the intellectual possessions.

Music and Physical Development.

Under the head of exercises, Milton advocates an allowance of one and a half hours before noon for exercise and rest, but this time may be increased when the days are longer and rising time earlier. Sword practice and wrestling are recommended, followed by rest, during which time the students listen to lectures upon music, accompanied by illustrations of the various musical compositions. This course of procedure is to make them gentle and even-tempered. After dinner more music is given. Two hours of work is followed by a sudden alarm that sends each young man to his military station, for he receives such instruction. Excursions on horseback are occasionally made and the surrounding country carefully studied. There are occasional trips to the sea to study sailing and sea-fighting.

Speaking of the last division of his subject, diet, Milton suggests that it be plain, healthful, and moderate, and that it would be best when all the students are in the same house. He con-

cludes by saying that it is not every teacher who can work this plan. To which statement we will all heartily agree.

Summary of Educational Plan.

It will be observed that the chief aim of this scheme is religious, the realization in the individual of the presence and power of God and that a lesser aim is patriotism. The methods are objective and include gradation of difficulties, emphasis upon realities, the union of the theoretical and the practical, diversity of curriculum and appeal to nature. The physical, mental, and spiritual receive each its due attention.

(To be continued next week.)

Executive Committee, N. E. A., 1902-1903.

CHARLES W. ELIOT, president, Cambridge, Mass.
ORVILLE T. BRIGHT, first vice-president, Chicago, Ill.
WM. M. DAVIDSON, treasurer, Topeka, Kan.
ALBERT G. LANE, chairman of trustees, Chicago, Ill.
W. T. HARRIS, United States commissioner of education, Washington, D. C.
IRWIN SHEPARD, secretary, Winona, Minn.



Chemical Laboratory, State Normal School, Winona, Minn.

School Equipment and the Educational Trade.

Under this head are given practical suggestions concerning aids to teaching and arrangement of school libraries, and descriptions of new material for schools and colleges. It is to be understood that all notes of school supplies are inserted for purposes of information only, and no paid advertisements are admitted. School boards, superintendents, and teachers will find many valuable notes from the educational supply market, which will help them to keep up with the advances made in this important field. Correspondence is invited. Address letters to *Editor of THE SCHOOL JOURNAL*, 61 East 9th street, New York city.

There have been many complaints concerning the plumbing of the Chicago school buildings. The committee of buildings and grounds has investigated the matter and its report will place the matter in shape for improvement of the criticised conditions. In the old buildings the committee found that the fixtures were often not up to modern requirements, but the work of replacing these with the latest fixtures is progressing rapidly. Alterations have already been made in seventy-five schools. As to the fixtures used in recent years the committee has found the iron range washout type perfectly sanitary, but it advises for the future the use of the heavier porcelain fixtures.

Photography is especially well fitted to aid the study of geography and natural history in many of its branches. It is also useful to the study of English by suggesting subjects for story and descriptive writing. In many cases it may serve to stimulate interest and competition of a most healthy character in school and college life. Its importance as an adjunct to school work is accordingly growing.

A little book entitled "The Right Reading for Children" has just appeared from the press of D. C. Heath & Company in connection with their course of supplementary reading-books. This book is a compilation by Charles Welsh, of a body of opinions, put forward by prominent educators, on the right reading for children in the school, home, and library, together with an introduction on the necessity for right reading. The book is a readable and helpful contribution on a very important subject.

Many schools are using typewriters at present and the question of a suitable paper for such use has become an important question with many school principals. A. C. McClurg & Company, of Chicago, have collected the best products of several mills and are selling them. Their sample book "H," will be a great help to any one interested in first class type-writing papers.

Gillott's pens have won their fame thru merit and thru supplying everything that can be demanded in the pen line. At present they produce pens for writing by the ordinary slant, semi-slant, or vertical writing systems. The care and attention which is paid to their designs and details of manufacture show that their reputation is well earned. These pens received the highest award that was ever given to a pen manufacturer, the Grand Prix at the Paris exposition in 1900.

A pen and pencil holder has recently been patented by J. S. McClurg, of Colorado. Its object is to provide a receptacle for holding a number of pens or pencils separated and clearly distinguished from each other so that each pupil may select his own pen or pencil on entering school. The holder consists of a flat board with a number of spaced divisions forming channels for the reception of the pencil or pen. These channels are separated from each other by gum bands and the gum also completely covers them. Designating characters are placed opposite an end of each channel to aid in identification. The individual use of the pen and pencil can be insisted upon with this device and the indiscriminate use of such instruments prohibited.

After a contest of several months over various technicalities raised by several firms, the L. W. Ahrens Stationery and Printing Company was awarded the contract for furnishing the stationery and supplies for all New York city departments during 1903.

In the purchase of tools and benches for manual training work there is no economy in buying inferior goods. In fact the experience of most schools has been that the best is none too good. Hammacher, Schlemmer & Company have equipped schools and colleges, in every part of America and in many foreign countries, with tool specialties, for nearly twenty years. They are prepared to furnish everything in this line which their long past experience has proved the best for school use.

The Smith Premier Typewriter is almost certain to have the latest practical improvements which lead to typewriter excellence. That it has proved a machine up with the times and thus highly satisfactory for school purposes is shown by the number in use in public schools all over the country. The board of education of New York city has recently purchased thirty-five of them for use in the offices of the district superintendents and several for the use of the Brooklyn schools. These machines are also used in the schools of Elizabeth, N. J., and Wabash, Indiana.

It is often found that children learn quite as much by means of their games as they do by their regular study in school. The Mathematical Games for School and Home are intended to direct this play instinct toward the acquirement

of useful knowledge. The *Addition and Subtraction Game* consists of a pack of cards, each having an abacus and a number on one side and problems on the other. The game may be used by younger children by discarding the more difficult cards. Full directions as to playing are given in a little pamphlet. Teacher or parent can supervise the game, which will add zest and interest to the study of arithmetic.

It has been found that these games interest even those pupils who have no natural aptitude for mathematics. They are edited by David Eugene Smith, professor of mathematics, Teachers college, Columbia university. The *Addition and Subtraction Game*, which is for second, third, fourth, and fifth year, was prepared by Earl Trisler, a Cincinnati teacher. (The Cincinnati Game Company, Cincinnati, Ohio. Sample pack, postpaid, 25 cents.)

The "Gurney Book," published by the Gurney Heater Company, of Boston, is a large and handsomely printed catalog of steam and hot water heating apparatus. A large number of excellent engravings show the heaters the firm has in the market.

The simplicity of mechanism of Laing's Planetarium especially recommends itself for school purposes. By means of this apparatus relative movements and positions of the sun, earth, and moon can be easily understood. A large amount of business has been done by this firm recently in the West.

The Perry Pictures Company has arranged several sets of pictures especially adapted to the Christmas trade. No two are alike, and if you wish a set it will be made up for you from their complete list of 2,000 subjects.

The department of school supplies, of New York city, is at present working to construct a desk with a sliding top in order that the top may be placed as near the pupil as may be required by the demands of health.

The Columbus Egg Safety Ink-Well sold by Cushman & Denison is a most ingenious invention. It may be carried anywhere, overturned, or tossed about without spilling ink. This is because of its peculiar construction. It consists of a rubber bulb with a glass funnel inclosed in a highly polished egg-shaped aluminum case. Its peculiar shape causes it to right itself at once, when it is overturned, thus spilling no ink. But recently placed on the market, it has met with great success.

There is probably no lock made like the keyless lock manufactured by the Gregg Keyless Lock Company, of 548 Halstead street, Chicago. The merits of this device have naturally produced a large trade. A recent order was for 1,400, to be used in the Rochester high school.

The Fred Frick Clock Company, of Waynesboro, has constructed an electric program clock which seems almost perfect in its way. The object of this invention is the production of efficient mechanism by means of which certain pre-arranged signals may be automatically and electrically brought into action at times and places desired. This is used in schools, colleges, and institutions in announcing times for studies, recreation, rising, retiring, etc., in fact, everywhere that regularity is a necessity according to a pre-arranged program. These clocks have also proved themselves very satisfactory in actual service, for the head of the school, college, or institution, is relieved of the annoyance of not having signals given promptly, with all the attendant confusion among pupils.

The University of Chicago has placed a contract with the American Blower Company, of Detroit, for the installment of ten large steel plate fans, and over 16,000 feet of heating surface. The same company is also installing its mechanical draft apparatus at Bryn Mawr and Wellesley colleges.

The new South Division high school of Chicago is to be installed with the heat regulating system of the National Regulator Company. This system has been in use by the Chicago schools for over a year and has proved very satisfactory. This concern manufactures a graduated motion thermostat which is very simple and sensitive, and which has proved very satisfactory in schools and other large buildings.

Soundproof Partitions.

Professor C. L. Norton, of the Massachusetts Institute of Technology, has made experiments with various devices for rendering partitions soundproof. The Cabot sheathing quilt he found to be easily demonstrated to be the best. The Cabot quilt is made of dry seaweed padded between two thicknesses of paper or, in buildings of fireproof construction, of asbestos paper. As a result of these experiments the Cabot quilt is to be used in the new building for the New England Conservatory of Music.

Equipment of Principal's Office.

In these days of large and spacious school buildings, the fitting of the rooms and particularly of the offices of the principals is receiving more and more attention. These rooms vary greatly. Some are large, some small, these plain, those luxurious; one severe, the other extravagant, as the taste of the principal or the building committee may have influenced the appearance.

The office of the fine public school at One Hundred and Eighth street and Amsterdam avenue, for instance, is as charming and cosy a place as one could desire, but when visited last spring it contained simply a desk, a chair, and a pretty settee by the window, with the pillows arranged most invitingly. Yet this building is considered one of the finest and most complete public school-houses in Greater New York.

The office of Superintendent Dutton, of the Horace Mann school, shows a much larger and more varied equipment. It is a spacious and well-lighted room. The floor is covered with Brussels carpet. Its equipment consisted of the following:

A handsome oak, roll top Derby desk, from the Boston firm of that name; waste basket, book case, chairs, typewriter, tables, educational and literary publications, telephone, electric bells, pictures, calendars, a self-winding clock made by the New York Clock Company and Johnson's system of temperature regulation, made by the Johnson Electric Service Company.

The Desk.

Perhaps the most important article in the equipment of a principal's office is his desk. The school supply companies handle such a variety of these that each person's individual preference may be gratified. Some principals prefer a roll top desk, while others consider the flat-top desks the better for their needs. Both have strong points to recommend them. Altho the roll top desks are undoubtedly the finer in appearance, the majority of principals' desks are of the flat top variety, and these are the kind the school supplies usually carry.

The American School Furniture Company show an excellent line of principals' desks which are warranted and will give satisfaction.

Chairs.

No one item of the equipment of an office has so great an influence upon one's comfort as the chair in which a considerable portion of each day is spent. The school supply companies carry a line embracing all styles from a plain wooden chair to a cane seat and back, tilting revolving chairs, and beyond a doubt, every one will be able to find something to his taste. A fine cane-seated chair handled by the American School Furniture Company has an extension cane back and bent wood arms, screw and spring and is revolving. It is perhaps the most comfortable chair made for the principal's use.

Tables.

The Yawman & Erbe Manufacturing Company show a splendid line of high grade desks, tables, chairs, and letter files. One of their handsomest desks has a very high roll top, with interior and exterior very highly finished. It is made in three lengths; also, with letter file in right pedestal in place of the three lower drawers. Another has a swell front and swell interior. The wood is all selected and exquisitely matched, and the finish is as high as the finest piano

finish. It is made in mahogany or quartered oak, with either wood top, leather center bed, or entire leather top. This firm also carries an endless variety of tables. They can furnish tables to match any office furniture, with oak or imitation leather top.

Filing Cabinet.

The up-to-date principal's office is incomplete without a filing cabinet. Brown & Besley of 10-12 North Canal street, Chicago, manufacture an attractive line of cabinet letter files, pigeon hole cabinets, box files, indexes, and filing cases for all cabinets. The letter files and filing systems of the Commercial Letter File Company, of Chicago, have also achieved an enviable reputation. Their systems are noted for their superior qualities and perfect adaptability to the uses for which they are intended. The Commercial has been on the market only a short time, but the company claim that it is now equally good if not superior to any of the older makes. It is one of the most accurate, simple, practical, and economical letter filing systems on the market. The endeavor has been to embody all the desirable features in other makes and to substitute devices for those proving useless or unsatisfactory. The envelope distributor of the Globe-Wernicke Company, Cincinnati, is also a handy device for saving time and trouble to the principal who does considerable correspondence. The Ethical Culture school on Fifty-Fourth street is among the New York schools which makes use of an envelope distributor.

Desk Pad.

The Globe-Wernicke Company's flexible desk pad (Cincinnati), is finding considerable favor with principals and educators generally. This desk pad will not warp or curl, but lies flat on the desk at all times. It has round corners of genuine calf, which are "built up" to take in blotters. The top and bottom are covered with soft flannel. The Flexible Desk Pad will not scratch the finest desk.

Bells.

Many schools and principals' offices are being equipped with electric bell outfits complete by Hammacher, Schlemmer & Company, New York. They have them in all styles.

Clocks.

An excellent timepiece for the principal's use is the Frick Automatic Program Clock, made by the firm of that name in Waynesboro, Pa. It is a valuable assistant in school management as it will operate secondary clocks and electric bells in each school-room, giving correct time and correct signals for opening and closing school, intermissions, passing of classes, etc., thus saving time and raising discipline to the highest plane. It will change different classes at different times in the various departments, or all classes simultaneously, making all changes of program automatically.

The Prentiss Clock Improvement Company, of 49 Dey street, New York, also make a variety of clocks which are extremely useful in school buildings.

Among the varieties they offer is a sixty-day clock, which, as it requires winding but six times a year, is a perfect labor-saving device. A calendar, absolutely automatic and perpetual requiring winding but once a year, is another novelty. They also have a large line of program clocks and various arrangements for keeping all the clocks in a building under the control of a central clock.

Another good clock for the principal is the Self-Winding clock of the New York Clock Company which as its name indicates requires no attention to keep it running.



PROGRESSIVE STATE SUPERINTENDENTS WHO WERE RE-ELECTED IN NOVEMBER.

State Supt. Thos. T. Tynan, Cheyenne, Wyo. State Supt. W. K. Fowler, Lincoln, Neb. State Supt. J. Y. Joyner, Raleigh, N. C.

Good Light for School-Rooms.

Great progress has been made in recent years in the solution of the problem of lighting rooms. A most satisfactory report on this subject was published in 1900 by Professor Charles L. Norton, of the Massachusetts Institute of Technology, of which a summary appeared in THE SCHOOL JOURNAL at the time. A final draft of this report has just been published in an amended form.

The tests made by Professor Norton were very elaborate and nearly every kind of glass in use was tested. The results may be briefly stated as follows: The light in a room thirty feet or more deep may be increased from three to fifteen times its present effect by using "Factory Ribbed" glass—another name for finely corrugated or ribbed glass, instead of plane glass in the upper sash. By using prisms under certain conditions, the effective light may be increased to fifty times its present strength. The gain in effective light on substituting ribbed glass or prisms for plane glass is much greater when the sky angle is small, as is the case of windows opening upon light shafts or narrow alleys. The increase in the strength of the light directly opposite a window in which ribbed glass or prisms have been substituted for plane glass is at times such as to light a desk or table fifty feet from the window, better than one twenty feet from the window had previously been lighted.

It is needless to say that these facts should be given careful attention by school boards and school superintendents. Every teacher knows that under the present system of lighting with plane glass that the inner part of the room is never well lighted. Then there are always spots where children with weak eyes cannot be seated, near the windows the light is too strong, in the recesses of the room it is too dusky. The whole problem is to distribute the light properly.

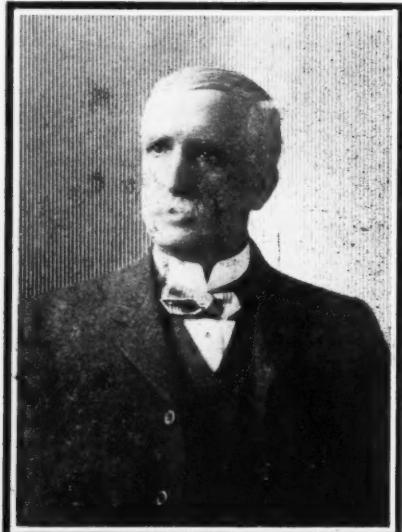
According to the requirements of Professor Norton if the upper sashes of the school windows are supplied with some type of corrugated or prismatic glass the light will be deflected to the ceilings. The light will be reflected to the desk without any danger of strong lines of light, which may be injurious to the eyes being thrown upon them.

For school purposes the "factory ribbed" glass is the most preferable medium of lighting. It gives a diffused light that hardly deepens anywhere in a room to half-tones. It costs little more than double-thick plane glass, and it increases the amount of effective light from three to fifteen times.

The results and conclusions of Professor Norton's careful work are embodied in a special report of the Associated Factory Mutual Fire Insurance Companies which have taken up the subject of wire glass from another standpoint than that of diffusion of light, but their standpoint, wire glass as a fire stop, must also be of interest to school authorities. The glazing of a school's windows is now of great importance, as wire glass is in common use as a fire stop and heat retardant.

When this fact was first presented, it was regarded with great distrust, but artificial tests and practice have justified its merits. It therefore happens that many window spaces in schools, which formerly would have had to be closed up, may now be made safe with wire glass, yielding more effective light than ever before.

School officials should consider these facts very carefully, for the lighting of a school room is of the utmost consequence and worthy of the greatest care and study, for on this depends the sight of many pairs of eyes. Good light will insure good work, while poor light will spoil the eyes, study will become irksome, and discipline will certainly grow lax.



Supt. Edwin F. Moulton, of Cleveland, Ohio.

Corrosion of Steel.

The constantly increasing use of steel as a structural element in modern school buildings brings up the question as to the permanency of steel for this purpose. The examination of buildings, built only ten or fifteen years ago with steel framework, shows that there has been great corrosion within this short period. In fact, the steel in many cases has corroded to such an extent that there are serious doubts as to whether the framework will be safe after twenty-five years of use.

This is a subject which is of great importance to school boards when erecting new buildings, so that the experiments of Professor Charles L. Norton, of the Massachusetts Institute of Technology, upon the corrosion of steel and methods of preventing it are very opportune.

Moisture and carbon dioxide are the most active agents, Professor Norton believes, in causing much of the rusting of steel, and there can be little question as to the ease of access to the steel of both these agents.

When steel is bedded in the wall of the building, as is almost always the case in schools, the changes in temperature from time to time, as well as the constantly changing difference in temperature between the two faces of the wall, tends to cause a condensation of moisture in the wall at different points. Also the necessary carbon dioxide is most plentiful in cities, where the use of steel is most common. The carbon and moisture come in thru the bricks and stone and thru the joints. As a preventive of their effect Professor Norton finds that the coating of the steel with Portland cement is very satisfactory. From its alkaline nature the cement prevents the rust from gathering on the steel, but the steel must be clean when bedded in the cement to insure the most satisfactory results.

A covering with concrete, the experiments showed, to be far less satisfactory than the cement. Paints for preventing rust he believes are of doubtful value.

The general result of the whole series of trials seemed to prove perfectly clearly that the coating of all steel work with cement before applying the other building materials is absolutely essential if the formation of rust and consequent weakening of the steel is to be prevented.

Typewriters.

Since the publication of the symposium on typewriters in recent issues of THE SCHOOL JOURNAL the manufacturers of two typewriters have written us regarding the merits of their respective machines. The following is, therefore, presented as a supplement to the previous articles:

Some excellent speed tests have been made with the Fay-Sho typewriter, manufactured by the Fay-Sho Company, of Chicago. For the last four years it has been put in competition with other standard makes and its operators have usually won first prize for speed. The Fay-Sho has a single shift keyboard, easy action, and is comparatively noiseless—a most commendable feature, for the rattle of many typewriters is confusing and trying on the nerves. It is claimed that it is capable of any required speed, with the lightest tensions known to the trade, and light tensions mean the most work with the least fatigue and the smallest strain upon the nervous organization. In general appearance the machine is much like the Remington. It does not possess the "visible writing" arrangement, but this C. H. McGurin, the expert typist, considers an advantage. He says the first requisite is to educate the eye and the mind so that both may keep well ahead in reading copy or taking dictation, thus anticipating the action of the hands, which should become almost automatic. A high-grade operator seldom looks at his work and cares little for visible writing, unless engaged in filling blanks, miscellaneous tabulating, etc., which is necessarily slow work under all circumstances. Visible writing cannot compensate for the advantages of speed, power, wear, and versatility possessed by the older type of machine.

The Commercial Visible Typewriter, made by the Visible Typewriters Company, 300 Broadway, New York, takes up little room, yet is said to be large enough to contain more novelties and desirable features than any other writing machine on the market. Every part is accessible for cleaning and handy for operating. It has a light, elastic touch, and quick action. It is the only typewriter equipped with a practical horizontal and vertical ruling device. It has good manifolding by a new application, with printing platens interchangeable for various classes of work. It possesses the universal keyboard with shift key, and is so constructed that this keyboard is interchangeable for all languages. It has a light-running ball-bearing carriage, six widths of spacing, detent release for writing on plain or ruled paper, new facilities for letter insertion, a line lock that stays locked until released, with six degree release. No shifting or lifting of the carriage is necessary, as the paper is held so that work is always visible. It is fitted with a paper inserting locator and a front and back paper feed with power applied to both sides of the paper, without releasing, and is arranged for column and perpendicular printing. It may be equipped with the Peck Book-o-type attachment, a feature which will be appreciated, as much of the time and labor spent in writing in bound books will be lessened by its use. The ribbon-

spools are interchangeable and the machine is designed to carry two colors at one time. Perhaps few machines on the market to-day possess so many improvements as the Commercial Visible Typewriter.

The Heliopticon in School.

The stereopticon of to-day bears little resemblance to the crude instrument of a few years ago. Now the investigator and the educator find it an indispensable aid. In its improved form most delicate investigations into chemical, physical, electrical, and pathological phenomena are possible. By the aid of the stereopticon the educator can illustrate in the most effective manner, physiology, botany, natural history, chemistry, and other sciences. The catalog of the McIntosh Stereopticon Company, of Chicago, shows a vast variety of stereopticons and allied appliances. There seems to be nothing in this line that might be of use to the educator or lecturer which they do not have in its most improved form.

But perhaps the McIntosh Heliopticon is the most interesting apparatus in the list. Many children cannot retain ideas which they receive thru the medium of books, but when they are accompanied with illustrations their minds easily comprehend and retain the description. This fact gives peculiar value to the McIntosh Heliopticon which meets the problem well and does away with much costly apparatus, charts, and maps.

With its aid lessons in drawing, geography, natural history, geology, and botany may be illustrated and made more interesting and valuable. Specimens can be easily mounted for use in instruction thus supplementing the 100,000 different slides which the McIntosh Company has already prepared.

The Heliopticon is especially valuable in microscopic work, for with its aid it is possible to magnify an object one thousand diameters or a million areas.

The Heliopticon may be used with sunlight or with artificial illuminants, an advantage which is obviously valuable. Thus the apparatus is especially adapted to daily use in all schools and educational institutions and, when intelligently employed, will certainly arouse greater interest and afford a more valuable and varied means of illustration than any other apparatus designed for object teaching. The headquarters of the McIntosh Stereopticon Company is at 35 and 37 Randolph street, Chicago.

Inexpensive Micrographic Camera.

Teachers of science often desire a photo-micrographic camera to use in their school work but are prevented from having this useful piece of apparatus by the expense. They will be particularly interested in the combination of an ordinary microscope and camera recently made which produces photo-micrographs, ranging from comparatively low amplification up to 1500 diameters, not inferior to those made with more expensive instruments.

In the construction of this attachment four conditions were borne in mind: that nothing should interfere in the slightest degree with the use of the microscope in the usual way; that the microscope might be used at any desired inclination or tube-length, and with any convenient source of light; that the adaptation and removal of the camera should occupy very little time, and that the amplification and definition of the photograph should always correspond to that seen in the microscope. The camera used in this apparatus is a box with any kind of a plate holder at the rear and a fixed focus lens of ten inches focus at the front. The microscope is to be adjusted as for the normal eye. A camera designed in this way, when applied to the eye-piece of the microscope, will reproduce the image seen in the microscope, correct in definition and amplification.

The camera is mounted on a frame so that it may slide longitudinally to and from the microscope. The advantages of this apparatus are: lightness, ease of use and of separation from microscope, and its inexpensiveness. The maker of the instrument is Frederick E. Ives, of the Franklin Institute at Philadelphia.

Fixed Focus Microscopes.

A part of the display at the museum of the New York Botanical Garden is intended for public instruction. This is made possible by the use of twenty-four microscopes of special design. By a variety of clamps and blocks the lenses remain in focus and all chance of accident to the exhibition object is practically removed. The objects selected for display are at present chosen from among the lower plants and help to illustrate the exhibits in the neighboring cases of the museum. Each microscope is accompanied by a label bearing a moderately detailed explanation of the object exhibited. By this means botany becomes more intelligible to the general public and at the same time the cases become of greater use to the student.

Johnston Maps and Globes.

The value of a map depends upon whether you can rely on it and this has been the principle which W. & A. K. Johnston, of Edinburgh and London, have worked upon in building up a business which is now the oldest and largest map publishing business in the world.

In order to make a map complete and reliable the compila-

tion of a large amount of geographical data is necessary. Geographical societies are nearly all limited in their scope by the limits of their own country. The Royal Geographical Society of England, however, is of international scope. It is the largest of all, and as it is supported by the British government, its resources are unlimited and its investigations cover the entire world.

By virtue of their situation the Messrs. Johnston have free access to the maps, drawings, and data of all kinds in the possession of the Royal Society. Thus their maps contain all that is latest and best in the science.

The J. M. Olcott & Co., of New York and Chicago handle these maps in this country and are prepared to furnish any kind of map or globe on the market. Their system of maps includes series of political, physical, classical, and Scriptural maps.

Their globes are very carefully constructed and guaranteed to be the best in accuracy and utility.

They are colored in oil by hand and this puts them in the most durable and substantial form.

To be fully appreciated these maps and globes must be seen. A sample will be gladly sent, which may be returned if not purchased.

A Catalog to be Proud Of.

The department of science of the Kny-Scheerer Company has published a catalog which surpasses anything which has ever been done in this line. It is a catalog of insects and a list of entomological supplies. Not even in Germany, the home of detail and specialization in science work, has any such catalog been produced.

The purpose of this production is to meet the greatly increased demand for specimens, collecting and preserving utensils, and material for teaching purposes.

The list of insects covers and exhausts the whole range of the subject. A more complete list and more careful classification of the names of the thousands of insects would be hard to find. A feature of this part of the book is the splendid illustrations of various insects. The anatomical models of the bee and the silkworm are particularly noticeable.

Besides the catalog of insects there is a complete list of all sorts of entomological books and apparatus. All the various kinds of mounts, cases, and instruments for use in the collection and mounting of insects are classified.

Perhaps the greatest novelties in the line of apparatus are the various cages and boxes designed for the breeding of the insects. This is a novel branch of the work in natural science and the list of the Kny-Scheerer Company provides everything that could be wished for in this line. The caterpillars, aquatic insects, and wood-boring larvae are particularly well-taken care of in this line.

This catalog should be in the hands of every science teacher and museum curator who desires to be up with the times, for it is without question a masterpiece in its field.

Primary School Looms.

Hand loom weaving is a very fascinating and useful employment and has been especially taken up for children in the lower grades of the schools. Todd & Todd, of Minneapolis, Minnesota, have designed a special soft-wood loom, at a very reasonable price. This was especially intended for the Minneapolis schools, where there are 7,600 in use. But the satisfaction which it gave in the industrial work of the lower grades there led to the adoption of this loom in other cities, for its cheapness, simplicity, and durability is unsurpassed by anything in this line. There is nothing about it to come off, nor to be lost, so that it is ready for work at all times. Its design is so simple that the child can string the warp, weave the rug, and remove it from the loom without help from anyone, a feature which is very desirable in a large school-room. This firm also carries a supply of the needles and yarns necessary for making the rugs.

A New Envelope.

A new envelope has been invented which is intended to do away with tampering with a sealed letter. There have been two ways which thieves used to open envelopes to ascertain their contents,—one by forcing the flap open with a thin metal knife, and the other by steaming the envelope until the mucilage no longer held the flap. The new envelope prevents all this. It has a sheet of tissue paper attached to the flap and extending down inside the pocket. When this is sealed it is almost impossible to open without breaking the tissue, but to make detection against steaming more certain another safeguard is provided. The tissue is secured by a special colored mucilage, which liquefies instantly on coming into contact with steam, and flows over the inside and outside of the letter, thus indicating absolutely the use of improper methods to ascertain the contents.

An Artificial Marble.

A substitute for marble has been invented by a Dane which closely resembles the genuine marble and which is to cost only one-tenth as much. This stone has the delicate transition of tints and play of color that distinguish the natural original. It is claimed that even pictures may be made of this new material.

The Educational Trade Field.

Mr. J. R. MacDonald, formerly manager of the educational department of Macmillan's New York office, has returned to Boston as manager of the New England field.

Mr. W. H. Ives has succeeded him in the New York office. Mr. Ives has been with the Macmillan Company, in the educational department, for several years. Before becoming connected with this house he spent several years in teaching at Stephens' Technical institute in Hoboken. Mr. Ives also practiced law for a time, being a member of the New York bar.

The American Book Company is to have a large new building in Cincinnati, as already announced in these pages. While the plans are not entirely completed it is proposed to construct the building of steel and terra cotta. It will be about 300 feet by 150 feet in size.

The business of the Chicago Binder & File Company has increased very rapidly. B. E. Elliot has been appointed advertising manager of the concern.

Mr. Frank F. Powell, for some years with the American Book Company, has accepted the position made vacant by the recent death of Mr. Wm. J. Abbott, as manager of the educational department of Woodward & Tiernan Printing Company, St. Louis. Mr. Powell is a college-bred man, and has a wide acquaintance among the book men and educators of the Central and Southern states. He was also engaged for some time in the high school and college work in Ohio and Indiana.

Mr. Butler, of the Butler-Sheldon Company of Philadelphia, has been in New York on business, the past week.

E. B. Campion, who has been connected with Henry T. Coates & Company, Philadelphia, since 1870, has entered upon the retail book business for himself.

Mr. August Wilke, who was associated with the Prang Educational Company for many years, both in the East and in Chicago, died at Georgetown, Wash., on Nov. 2.

C. M. Larson, who was formerly connected with Rand, McNally & Company, has accepted a position in the credit department of S. D. Childs & Company, of Chicago.

The holiday catalog of William R. Jenkins is now ready and it contains a fine list of French authors and French calendars suited to the wants of the season. The calendars are original and many of them very charming. They are designed by Mucha, Sonrel, Rossi, and other well-known artists.

Mr. Simmons, superintendent of school supplies in New York, will advertise shortly for bids on school supplies for the ensuing year.

The small dictionaries which have been in use in the New York public schools are now done away with, as the board of superintendents has peculiar notions concerning publications of this kind.

W. J. Sheridan is doing excellent work in New England as the agent for the University Publishing Company.

Mr. Robert Foresman, who recently left the book field to enter upon insurance, is again connected with Silver, Burdett & Company. While his work will have to do chiefly with the editorial side of the musical publications of the firm, he will devote some of his time to introducing music books into the schools of various parts of the country. Mr. Foresman is the author of the "Modern Music Series," which has proved one of the most successful musical texts ever published. Since its appearance two years ago, it has been introduced into ninety-five per cent. of the schools which have changed music books in that period.

The C. M. Barnes Company, Chicago, has moved from 262 and 264 Wabash avenue to larger and more conveniently arranged quarters at Jackson boulevard and Van Buren street.

Mr. J. F. McCullough, for eight years connected with Silver, Burdett & Company, has opened a teachers' agency with an office in the Fine Arts Building, Chicago. He was for several years a principal in Springfield, Ill., and later superintendent at East St. Louis.

Daniel Van Winkle, so well known in the metropolitan book field, is now representing Wm. H. Wheeler & Company, of Chicago. His office is at 3 East 14th street.

The retirement of Henry Macy Upham from the firm of Daniell & Upham, of Boston, on November 1, is a notable incident in the history of the famous old corner book store which has been a Boston landmark for more than 225 years. During his forty years' connection with the firm Mr. Upham

has been the associate of a large circle of writers, many of whose names are household words in English-speaking homes.

The well-known advertising agency of N. W. Ayres & Sons have removed to the seventh and eighth floors of the Mariner and Merchant building, No. 300 to 308 Chestnut St., Philadelphia.

Howard R. Coffin, formerly at the New York office of Ginn & Company, is now in charge of their Philadelphia branch.

A new building is to be erected near Union Square especially designed for publishers and similar trades. The new building is to be eleven stories in height. Messrs. Doubleday, Page & Company purpose to take a large space in the new building and the rest will probably be used by allied trades as photo-lithography, books and magazine binding, electrotyping and printing. Such a combination under one roof is expected to be mutually advantageous.



Boston News Letter.

The meeting of the Massachusetts Teachers' Association November 27-28 was only moderately successful from the book publisher's point of view. A large and very creditable exhibition of texts and other appliances was gathered in the lower hall of Tremont Temple, but somehow the length and interest of the program upstairs kept the crowd away from the display. Most of the prominent Boston book men were present at the meeting.

Among the strong exhibitors were Silver, Burdett & Company, represented by A. E. Carr and Miss Gertrude Rogers; Thompson, Brown & Company, represented by J. G. Thompson; Maynard, Merrill & Company, by H. I. Smith; Benjamin H. Sanborn & Company, by F. W. Jewett and S. M. Pierce; Ginn & Company, by LeRoy Phillips; the Palmer Company, by F. H. Palmer, Mrs. Palmer, and Herbert Palmer; Houghton, Mifflin & Company, by J. D. Phillips; the Macmillan Company, by G. H. Brown; E. L. Kellogg & Company, by Herman Goldberger; J. L. Hammett Company, by W. J. Sheridan and Miss Mae Davis.

Dr. W. N. Hailmann, who left his superintendency at Dayton, November 1, has arrived in Boston. He will have charge of the editorial department of C. C. Birchard & Company, an enterprising young firm, which may properly be congratulated upon securing the co-operation of so eminent an educator as Dr. Hailmann. Boston, by the way, has been drawing strongly upon the West of late. Last spring Ginn & Company brought Dr. Thurber on from Chicago. This fall Dr. Albert Leonard began work as educational adviser of Houghton, Mifflin & Company.

Since November 1, Mr. J. R. McDonald has been back at his old stand with the Macmillan Company. He went over to New York some time since with an understanding that he might return to Boston if for personal reasons he preferred so doing.

The Soule Art Company has been conducting a great removal sale.

Mr. Horace K. Turner, formerly with the Soule Company, has started an art publishing business of his own with offices in the Paddock building. His traveling art exhibitions circulate extensively thru New England.

Another "educational newspaper review" is promised—a weekly newspaper for children. The editor is Mr. E. Horace Perley, lately of the Boston *Globe*. The first number is to be out January 1. Sample copies show a neat publication of somewhat the size and appearance of the Harvard *Crimson*, but carrying no advertising. The matter is well written and prevailingly interesting, tho some attention is paid to mere "fill-up" that is of no especial news interest. Whether a place exists for a children's weekly newspaper will be interesting to determine.

Messrs. W. E. Cochrane and W. S. Mack, of New York and Chicago respectively, have been in Boston, attending directors' meeting of the Prang Educational Company.

The extent to which Ginn & Company are publishing books that are calculated to attract general as well as school sale surprises one who knows how closely the line has been drawn of late years between the two classes of publishing. Perhaps the strictness of the demarcation will be relaxed presently. Mr. G. A. Page, of L. C. Page & Company, tells me that it is good policy for authors to write and publishers to print books that will meet with use in the schools and at the same time be available for holiday sales.

Neatly printed cards announce that Kenney Bros. & Wolkins, successors to Geo. S. Perry & Company, manufacturers of school furniture and settees, are to be found at 73 Fulton street, Boston.

F. W. C.

The Book World.

Just as THE SCHOOL JOURNAL goes to press the news is received that Mr. B. F. Johnson has resigned the presidency of the B. F. Johnson Publishing Company, of Richmond, Va.

Prof. Charles McMurry, of the State Normal school at De Kalb, Ill., has prepared an adaptation of Schiller's "Wilhelm Tell" for sixth grade pupils. It is to be published by Silver, Burdett & Company.

A book of this character has never been previously adapted for pupils of so low a grade as the sixth, and Professor McMurry believes that it is a distinct step forward. The book gives abundant opportunity for dramatic work in school. In addition it is of interest in studying American history, as it is especially suggestive in relation to our struggle for freedom.

The next number to be issued by the University Publishing Company in its "Standard Literature" series is Tennyson's "The Princess." The introduction and critical notes are the work of Edward Everett Hale, Jr.

The November bulletin of the latest and best selling books, for sale by The Baker & Taylor Company, 33-37 East Seventeenth street, New York, has as usual a list of all that is worthy of being called literature which was published during the past month. It would be hard to find a more extensive list than this firm has constantly on its shelves, a list which is inclusive as to quality as well as quantity.

Excepting a few unimportant high school books which were removed at their own suggestion, Longmans, Green & Company had no books removed from the New York school list when it was recently revised. This was probably due to the fact that almost all of their high school text-books in use were books which have been recently revised and thus kept up to date.

To the reading public at large the announcement of the firm of Harper & Brothers, that during the last year the circulation of their periodicals has increased by two million and a half copies, is very interesting and gratifying. The old house had become to be almost, if not actually, a national institution. The reorganized house bids fair to continue this idea and its continued prosperity represents a boon conferred upon the whole reading public of the United States.

The Gregg Publishing Company, of 37 Washington street, Chicago, not only publishes commercial books, but also has a large and prosperous commercial school, where the famous Gregg shorthand is taught. Altho a comparatively new system, it claims the world's record for speed with legibility.

Indiana Text-Books.

It is quite possible that the Indiana State Board of Education may ask the next general assembly to revise the law fixing a maximum price that may be paid for text-books. School-book men say that a good first reader can not be sold for ten cents at a profit. It is stated, on the other hand, that a primary arithmetic can be gotten out for less than thirty cents. The difference, in Indiana, between the price of the primary arithmetic and the primary geography is only five cents. When it is remembered that colored maps are used and that geographies are among the most expensive of text-books, these comparative prices certainly appear absurd. There is no doubt that the inequalities and inconsistencies of the present law should be removed.

The existing contracts for arithmetics, geographies, readers, and copy-books expire in April, 1904. The state board must notify school officers whether the books already in use will be re-adopted or revised, or whether new bids will be advertised for, not less than a year before the contracts run out.

A special meeting of the state board will be held Dec. 18. Committees will report at that time on geographies, readers, and arithmetics. The members of the committees having these subjects in hand are: *Geographies*—C. N. Kendall, of Indianapolis; W. T. Stott, of Franklin; W. E. Stone, of Lafayette. *Arithmetics*—W. W. Parsons, of Terre Haute; F. W. Cooley, of Evansville; W. L. Bryan, of Bloomington. *Readers*—J. N. Study, of Ft. Wayne; Frank L. Jones, of Indianapolis; George Worley, of Kosciusko county.

The New International.

A new edition of Webster's International Dictionary has been recently issued which, by the addition of 25,000 new words, has brought the International, issued in 1890, completely up to date. A decade has passed since the International was first published and the years have been full of changes and growth in life, knowledge, and achievement. These changes have been reflected in the language and now must be registered in the dictionary. Such words as Marconi system, Crookes space, and Bertillon system are the results of growth. Thousands of words have been derived from the Spanish, Boer, and Chinese wars.

Besides these there are the old words that have changed their meanings and the obsolete words that have been re-

vived. All these words have been included in the new supplement and the work has been done by the best scholarship and most expert knowledge in the country.

A brief chronology of Webster's Dictionary may be of interest as showing the growth of the book which is the one great standard authority.

The first edition, called "American Dictionary of the English Language," was published by Noah Webster in 1828. After his death, the copyright was sold to George and Charles Merriam, of Springfield.

The first Webster's "Unabridged" was produced by the Merriams in 1847, under the editorship of Professor Chauncy A. Goodrich. The next revision was that of 1864, under the supervision of Dr. Noah Porter. In 1879, and 1884, various supplements were added.

In 1890, the famous "International" was completed after ten years of work by a large corps of scholars under the leadership of Professor Noah Porter.

The new supplement makes "Webster's" again the latest and the best. It is almost a complete library in itself, for besides filling the primary function of a dictionary it has a gazetteer of 25,000 titles, a biographical dictionary of 10,000 names of noted persons, a dictionary of noted fictitious names and places, a dictionary of foreign quotations, words, and phrases. No wonder, then, that with all these features it is universally used and commended.



Books Under Way.

D. C. Heath & Company.

"An Introduction to Botany," by William Chase Stevens, professor of botany in the University of Kansas. A text-book for high schools and colleges. With key and flora and 350 illustrations.

"Benjamin Franklin's Educational Ideal," by David E. Cloyd, A.M., inspector of schools for general education board.

"Schiller's Wallenstein's Tod," edited with notes by C. A. Eggert. 235 pages.

"Lilencron's Anno 1870," edited with notes and vocabulary, by Dr. Wilhelm Bernhardt. 179 pages.

"Goldos's Marianela," edited with notes and vocabulary by Professors Geddes and Josselyn, of Boston university.



The Book Age.—McCutcheon's latest in the Chicago Record-Herald.

"Cuentos Castellanos," edited with notes and vocabulary, by Mary D. Carter and Catherine Malloy.

Werner School Book Company.

Taylor's Third Reader.

Four American Indians.

Four American Women.

Emerson's Practical Spelling Book.

Houghton, Mifflin & Company.

Burroughs' "Literary Values."

"Life of H. I. Bowditch," 2 vols.

Larned's "Literature of American History Supplement."

"Silva of North America. XIII. and XV., by Chas. S. Sargent.

"Atlantic Index Supplement."

"Correspondence of Rhode Island Governors. I."

"Spenser's Prothalamion."

"Montaigne, I."

John Fiske, 5 vols., subscription, "Cosmic Philosophy," "Century of Science."

Rand, McNally & Company.

"Wings and Stings," by Agnes McClelland Daulton. Illustrated.

"Stories of Mother Goose Village," by Madge Bigham. Illustrated.

"King Arthur and His Knights," by Maude L. Radford. Illustrated.

"The Teaching of Arithmetic and Elementary Algebra," by Clinton S. Osborn.

"The Tree Dwellers, or the Age of Fear," by Katharine E. Dopp, Ph.D.

"Japanese Fairy Tales," by Teresa Pierce Williston. Illustrated.

"Tree and Shrub Calendar," by Clarence Moores Weed.

"Wild Flower Calendar," by Clarence Moores Weed.

"A First Book in Business Methods," by W. P. Teller and Henry E. Brown.

"The King of the Golden River," by John Ruskin. Edited by Katharine Lee Bates. Illustrated.

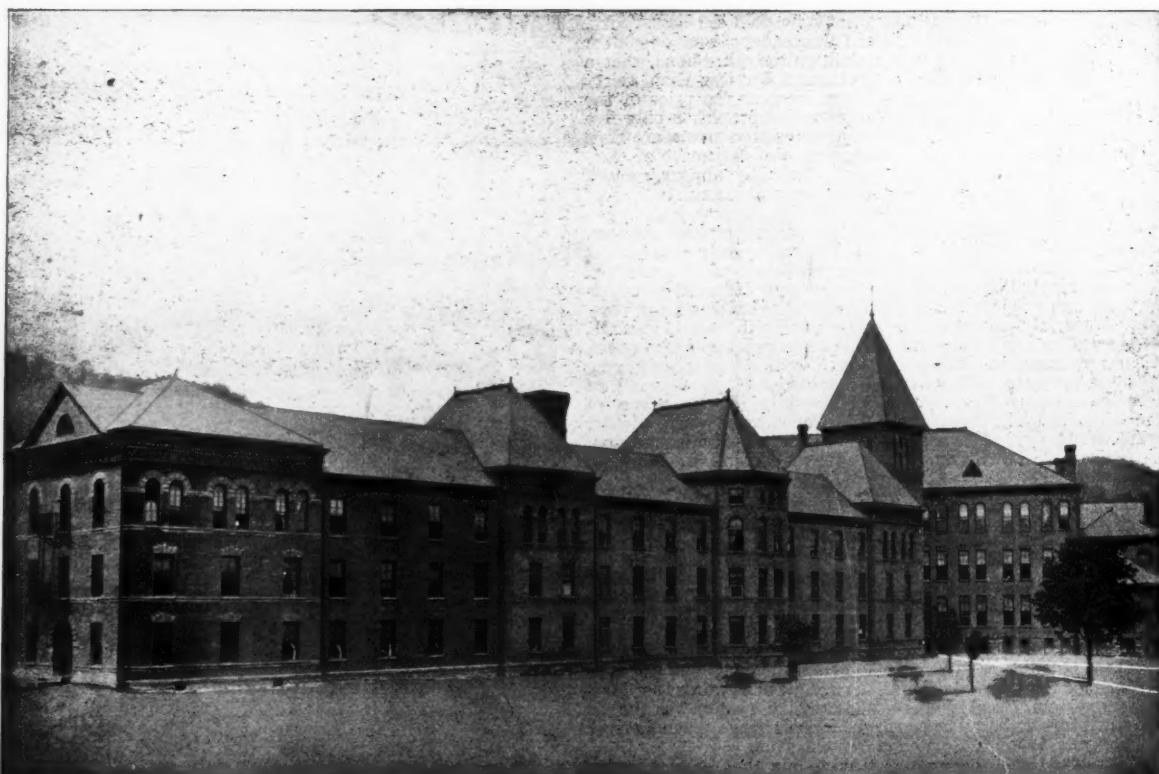


Dr. J. R. Flickinger, Prin. State Normal School, Lock Haven, Pa.

"Alice's Adventures in Wonderland," by Lewis Carroll. Edited by Florence Milner. Illustrated.

"The Story of a Short Life," by Julia H. Ewing. Edited by Sarah C. Brooks. Illustrated.

"Treasure Island," by Robert Louis Stevenson. Edited by Theda Gildemeister. Illustrated.



East Ward, Central State Normal School, Lock Haven, Pa. Dr. J. R. Flickinger, Principal.

School Law.

Recent Legal Decisions.

Compiled by R. D. FISHER, Indianapolis.

Nearly One Million.

The state of Indiana has won a long contest against the Vandalia railroad. As a result the state school fund will be increased by \$900,000. The Indiana legislature passed an act, in 1847, creating the Terre Haute and Richmond Railroad. Its authorized capital was \$800,000. The charter provided that the road could fix its rates until the stockholders should receive an amount equal to the sum invested and an interest of ten per cent. a year besides. When this point was reached the legislature was to have the power to regulate the tolls, and all net profits accruing in the future above a sum sufficient to pay fifteen per cent. dividends and meet contingent expenses, was to be paid to the general school fund.

The road began to pay dividends in 1852 and continued to do so until 1873 when it surrendered its charter and reorganized under the general railroad law.

The state demanded an accounting of the amount due the common school fund. This attempt at a settlement proved fruitless, so, in 1897, the legislature framed a law requiring the railroad to make an accounting in accordance with its original charter. The attorney general of the state at once carried the matter into court. The result of various trials is that the Supreme Court orders the railroad to pay to the school fund of the state \$913,000 and interest. The court held that the matter of regulating tolls and freights rested solely on the discretion of the legislature. The incorporators of the road were absolutely limited in the profits of the enterprise by the provisions of the charter and should have paid over the surplus to the school fund without reference to whether the legislature had or had not previously recognized the tolls and freight rates.

Can Dismiss a Teacher.

When Illinois displaced the school directors by the board of education it was provided that the new boards should have the powers of the directors and, in addition, the power to dismiss and remove any teacher whenever it may seem that he is not qualified to teach, or the interests of the school may require such action. The courts of the state have recently decided that the power of the board of education to dismiss a teacher is not limited to the specific causes, incompetency, cruelty, and immorality, which are enumerated in the statute. The board of education may, according to this decision, dismiss a teacher "for the good of the service," if it deems this action expedient.

Must Pay Tuition or Provide High School.

By a recent decision of the Massachusetts courts, the law, requiring any town of less than 500 families, which does not

provide a high school, to pay the tuition in the high school of another town of a child having completed the course of study in the schools of its own town, is constitutional. The constitutionality of this law was called in question by the town of Huntington, by reason of another school law. This provided that all moneys received by taxation in cities and towns for the support of public schools, and all moneys appropriated by the state for the support of the common schools, shall be expended in no other schools than those conducted under the authorities of the town or city in which the money is to be expended.

All the judges concurred in agreeing the first law constitutional on the grounds of public policy and of constitutional law as it is written.

Administration of School Funds.

The Supreme Court of California has recently ruled that a school district cannot sue a superintendent of county schools for turning over an unexpended balance of a district to the unappropriated school fund of the county. The district, by this decision, has no right to the whole of an appropriation for its benefit unless the superintendent sees fit to expend it.

Pay of County Superintendents.

The Colorado courts have given a decision concerning the pay of county superintendents for fractional days. The laws of the state provide that superintendents shall receive five dollars a day for every day actually and necessarily employed for the county. The court decides that the superintendent is entitled to daily compensation for each day on which substantial official service is performed, regardless of the time occupied in performing the service.

By a decision of the same court where a county superintendent has made out and certified a teacher's bill for compensation and mileage, the burden of proof must rest on the county board attacking such a record.

School Township Property.

The Indiana Supreme court has held that where a town is incorporated within the limits of a school township, and a board of school trustees for the school town is elected and qualified, the school-house and school property within the limits of the town, previously controlled by the township, passes into the control of the school board of the newly incorporated town. The fact that the township owed a debt for the purchase of the lot and construction of the school has no bearing on the legal aspect of the case for, as the court held, at the time of the incorporation of the town, there was no agreement making the payment of the debt a condition for transferring the property to the school town.

The township authorities of Maumee attempted to refuse to give possession until the town paid the school debt. They refused on a previous statute, but the court denied the applicability of that statute in this case, as it provided for the payment of school debts in schools acquired by cities by annexation. In this case the court held there was no annexation, but simply an establishing of a new school government, and this debt must be paid by the township.



Normal and Collegiate Institute for Young Women, Asheville, N. C. Under the auspices of the Woman's Board of Home Missions of the Presbyterian Church. Rev. Thomas Lawrence, D. D., Pres.

The School Journal,

NEW YORK, CHICAGO, AND BOSTON.

WEEK ENDING DECEMBER 6, 1902.

To connect joy with Christmas is high philosophy; to make the earth a joyful place is well worth the highest ambition of philanthropists.

The hope of the world lies in the children; this explains the care the father and mother so assiduously bestow. And it is coming to be seen that the mother is right in making happiness her first aim. The cry of the child signifies his unhappiness to her; she gives her best thought to cause him pleasure; no task is too great to reach this end. It is a sublime ambition in any one to render children happy, but none can accomplish this to the degree the mother can; she attains success because she follows her heart. The Creator consecrated the mother to the ministry of childhood; she understands that she fulfills her mission when she renders her child happy.

To stand before the Madonna holding the infant Jesus and not be conscious that there is typified the fate of the human race, is to fail to catch the idea the artist struggled to express. "Unto you a child is born, unto you a king is given" are words that have a deep meaning. Somewhere some child will be born that will bring larger happiness to the world. The human race is still looking for his star in the East, and it will continue to hope and continue to look. The figure the world sets before it is not a mighty man with a sword, but the mother and her child; it no longer despises one of these little ones; it believes in the little ones more firmly as the years go by.

The School-House a Social Center.

It is wonderful how rapidly the idea of making every common school the social center of the community in which it is located, has taken root. At first it seemed as if it would never pierce the indifference with which school people looked upon it. Two years ago the change took place, and now hardly a day passes that an enthusiastic endorsement of the new departure is not found in some form. Here are a few words bearing upon the subject, from the latest report of Supt. Aaron Gove, of Denver, Colorado, who was one of the first educators to bid a hearty welcome to the idea:

"Of all late forward movements in the educational world none stands out more prominently than the disposition to provide means of education for adults as well as children. Each little community surrounds a school-house, which more and more is becoming a meeting place for social communion—not for violent discussions, passionately uttered by partisans and extremists, but for conversation upon the many issues that confront the growing American neighborhood; not upon school questions alone, but upon every element that pertains to a new social life."

Mayor Low in his recent talk about the state of public instruction in New York city gave these significant bits of information concerning the tendency toward gradual enlargement of the scope of the common school:

"The use now being made of school buildings, for other purposes than the regular school work, is interesting. Vacation schools in Manhattan and the Bronx were availed of by 385,496 children; twelve evening play centers, since January 1, by 560,136; roof playgrounds, in Manhattan and the Bronx, by 305,789. Under the authority of the board of education certain outside playgrounds have been conducted, and the following figures show the use made of them. Forty-one playgrounds in Manhattan and the Bronx were used by 725,058 children; twenty in Brooklyn by 569,134; ten open-air playgrounds and six piers by 418,309. In these figures, of course, the same child is counted every time that he was on the grounds. There are also baths in one school building that have been largely used. It is

clear, therefore, that the school buildings are beginning to play an important part in the life of the children, aside from their educational function."

Provisions for a People's Club.

The plans for the new public school 108 show a number of new features in school designing. This new building is to contain forty-eight rooms and is to be used to some extent as a neighborhood center.

On one side of the lot, below the street level, an auditorium, capable of holding 1,200 people will be built. This will serve as an assembly hall for half the pupils who will have their class-rooms in other wings of the building. This will be so designed that it can be shut off from the rest of the building and thus used for lectures for the general public.

The top of this assembly-room together with a court which will be between two of the wings of the main building, will provide an open-air playground. This playground is to be on a level with the first floor of the school.

In one wing there are to be a gymnasium and shower baths for each sex; and these can be shut off entirely from the rest of the building when their use is desired for the general public.

In the opposite wing will be offices of the principal, district superintendent, and medical examiners. The principal's office will be connected with all parts of the building by telephones. There is a possibility that four elevators will be installed.

The outside kindergarten will be the most novel feature and will probably serve as a model for others. This will be a one-story building, placed on a slight terrace off the playground and will be bordered by a flower garden. This building will have a level roof upon which the second story of the main school, which is to be used as a kindergarten, will open and provide the children there with a playground of their own.

This building has been carefully thought out and seems to combine economy of space with a careful consideration for light and air.

The Coal Strike.

That there is a close connection of the coal strike in Pennsylvania with the public school no one who considers the matter can doubt. We have little faith in the strike as a means to a higher stage, but it must be looked at as a crude effort to a better pecuniary condition. The men leading it and the followers after them have a certain amount of knowledge and are guided by that knowledge. Their light may not be clear, but they are willing to go by it; it is all they have.

We do not look upon a strike as a symptom of a social disease, but as a weapon that bodies of men have found to be effective: just as a boy with a gun feels aggressive among those not equipped as he is. In the first historic years people divide into the strong and the weak; as civilization progresses the division is into the rich and the poor—this is the case in these present times. The great effort now is to get money; a comic paper illustrates it by picturing a clown drawing aside a curtain on a stage and displaying a sign, "Money, help yourself;" the crowd is shown that struggles forward, young and old, clergymen and women, boys and girls; one is really pained to see the fierceness of the effort; and yet, judging by the clothing of these frantic persons, they are not in need.

There is a money fever raging and children are infected by it in their early years; it is in the schools—the pupils and teachers alike suffer from its attacks. At graduation exercises a school official addressed the boys, telling them of a graduate of 1877 who had accumulated a quarter of a million of dollars and bid them to do as well or better.

It is not strange that a dissatisfaction exists with this classification of men into rich and poor. The public school is gradually making those able to spend a dollar a day equal mentally to those spending ten dollars daily—or more. The so-called workingman has a feeling of

mental equality; he knows he behaves quite as well and he objects to being rated below the other. There is in all the strikes the assertion, "We are of more consequence than the employer takes us to be."

We hold that this position has arisen from the establishment of the public school. We see no reason why this feeling will not be intensified as the public school is more firmly established. We have no plan to present to prevent strikes. But we do say that the church and the school have got to set up other than the money bag standard. How this will be brought about we do not pretend to say. Thoughtful teachers feel that the effort of the school must be character. The public says, "Turn out boys who can make money." Against this there must be continual protest; the need of the nation is not more money to each individual, but of a nobler ideal of life and of a more solid character. We need associations of those who are content to think high and live low.

One of the effects of the general prosperity of the country has been to cause a scarcity of teachers, especially in the Central and Western states. The demand for intelligent workers in various lines of business has steadily increased and these positions invariably pay better salaries than can be obtained in the schools.

Another factor in the dearth of teaching material has been the increasing demands made on the modern teacher without a corresponding increase in wages. Many of the teachers, even in the cities, do not receive \$500 a year.

The lack of teachers, resulting from these conditions, has aroused the school boards to begin a movement for increased salaries. In many states the legislatures are being urged to increase the school tax in order to provide better salary budgets.

In the last ten years the number of teachers in Boston has increased from 1,614 to 2,373; and the number of pupils from 62,000 to 86,152. The attendance in the high schools has increased ninety per cent. and in the kindergartens 150 per cent.

Why should students in colleges be ill-mannered? Most persons will give up on this conundrum; certainly, with their advantages, they ought not to be. A daily paper notes that several Columbia students were "boisterous," to employ the gentlest allowable term, in a theater; and in the same audience were an Indian, a Japanese, and a Chinese, all behaving most decorously. These last had not been to a kindergarten two years, a primary, a grammar school, and a high school each four years; they were barbarians and had not yet learned how to "cut up" in real civilized style.

The noted actor, Mansfield, refused to sell seats to the students of the Western Reserve university so they could sit together, preferring, in fact, he said, not to have college students in his audience. He had lately refused to make a speech at the demand of some students, whereat they hissed and berated him, and, smarting from this experience, he naturally wanted no more of their company. The fact is, that students have been encouraged to act in a rude and boisterous fashion by hearing the antics of other students described without a word of censure, but with the approval of winks and smiles. College faculties, too, have been exceedingly remiss. In one college the well-behaved students were forced to band together and demand that certain students be disciplined for misconduct before this was attended to. Another college was refused a contribution by a wealthy man because he had read accounts of serious disorder among its students.

There is no good reason why a pattern young man should change his demeanor when he enters a college. The higher one goes up on the educational ladder the broader should be his view, the more cosmopolitan his behavior. The college student should far surpass the high school student in courtesy and gentle behavior.

It looks ominous that Syracuse should be such an excellent patron of the state insane asylum—about 75 per cent. of them coming from that city. It used to be noted as the city of "isms," but that period has passed by. We have several times called attention to the rapid increase of insanity in this country and suggest it as a suitable subject for investigation by the N. E. A. Is there a connection between this fact and our style of civilization? We say our style, for there are several different kinds. A professor (an American) in the university at Tokio remarked upon the need that Christianity be introduced. "Not the American kind," said the statesman. Do not let us be too proud of our civilization.

Harvard university may add music to its list of admission requirements. The proposed innovation is a result of the new admission system in which students are entered on points, each subject counting more or less, according to the difficulty of mastering it. Music, the Harvard authorities believe, constitutes no small part of a man's real education, and consequently its acceptance as an entrance requirement would be directly in line with the educational scheme of the university.

An unfortunate oversight on the part of the proofreaders permitted the name of Mr. Frederick Manley to be misspelled in THE SCHOOL JOURNAL of last week. Those acquainted with the writer's convictions regarding the teaching of English and his individual, virile nicely of style, may have recognized the mistake at once. But others may have failed to assign proper credit to the rightful author of "Some Thoughts on Language Study," which invites attention to a few fundamentals among the soundly literary and pedagogical principles on which Mr. Manley is elaborating, with the co-operation of Dr. Hailmann, a series of texts for elementary and secondary schools.



AN INDIANA SCHOOL WAGON.

White county is among the first counties in Indiana to inaugurate public school consolidation. Ten wagons are used, accommodating 137 pupils who live too far from school-houses to walk. (Courtesy *The Indianapolis News*.)

Greek or No Greek.

President Eliot evidently set in motion a stone cut out of a mountain when he declared his willingness to graduate men from Harvard college without a knowledge of the Greek language. He stood on the broad ground that a man went to college for mental development, and if that was attained by other means than by studying Greek he was entirely satisfied. This position at once startled the other colleges, for Greek had been employed as an educational shibboleth; no Greek, no diploma.

The time has gone by for making the claim that one could not obtain an insight into Greek life, thought, and literature without knowing the Greek language. The claim once was made concerning the Jewish and Christian religions that one could not understand the Scriptures aright when translated into the vernacular language; Latin was used in the churches, it not being reflected that this was itself a translation from the original. But that claim was forced aside; so, too, has been the claim concerning a knowledge of Greek.

A knowledge of language is indeed important, for the laws of language are the laws of thought. One language is enough and any man with a good knowledge of Latin should not be required to understand Greek. The comprehension of one language is far better than a smattering of two. But there are young men who have a taste for languages, and we would permit all who chose to study Greek to do so.

At Oxford the question was debated whether both Latin and Greek should be required of candidates at the entrance examination, and, in a vote numbering 355, was defeated by only 23. It is apparent, therefore, that this common sense movement to drop off a clog to educational progress is sure to be effected in England in the near future. In the opposition it was said that nothing kept Greek alive in the preparatory schools but the action of the universities. To abolish Greek in them would abolish it in these schools and create a larger body of young men for the university. The expectation that the removal of Greek from its pedestal in Harvard would make the student's life an easier one has not been realized. President Eliot was the champion of "enriching" the course in the common schools twenty years ago; he has "enriched" the college course, also, so that a young man there has all he can do to get a diploma even if he does not study Greek. He was the leader in the movement to demand a better and larger preparation on the part of the preparatory schools; in fact, to increase the preparatory course an entire year.

It is more and more apparent that a knowledge of German and French are most desirable to the college student; heretofore in many colleges the amount of study given to them was laughably small, but the wealth of literature in the German language is now admitted and it is deemed wholly wrong for a college to allow a graduate to go out without a comprehension of this fact.

We hope the preparatory schools will press the question of abolishing Greek except at an "elective" in the colleges. The state of the public mind is now quite different from what it was when President Eliot proposed to make Greek an elective study. The experiment has been tried and graduates have survived; Harvard is thronged with students; it is the most popular college in the country; a "Harvard man" is recognized as a highly educated man. Hence we urge the preparatory schools to debate this question with thoroughness; it is an educational "question of the hour."



College Study of Classics.

Prof. J. J. Robinson, Princeton, A.B., Yale, Ph.D., head of the Latin department at Hamilton college, has contributed the following article on the reasons for the abolition of translations in the study of the classics at the college:

The question regarding the use of English translations in the preparation of language work is one of fundamental importance to every college man and to every patron

of a college or a preparatory school where youths are sent to make the best use of their time. The study of languages occupies a large amount of time both in the school and in the college. Anything which impairs the value of this work is of vital interest to all persons concerned.

After diligent search, covering many years the writer admits that he has not found a single successful scholar and teacher of languages, ancient or modern, who holds a view dissenting from that of the members of the faculty. Of Hamilton college it must be remembered that the question is on the subject of English translations as commonly used by young men in college and (I regret to say it) by many boys in preparatory schools.

Hamilton is favorably known in the college world as an institution which clings to the classical course. The classics are retained, and with reason. There is a place for such colleges in this country, and the large universities recognize the value and importance of good small colleges to the cause of sound higher education. All men interested in Hamilton will welcome every endeavor to promote sound scholarship and high attainment. The methods pursued must be sound and defensible. It is with this in view, with full knowledge of the facts and the purpose to promote the interests of all concerned, that your faculty (the writer makes these statements unofficially and purely personally) brings to the attention of all students that language study should be pursued seriously and rationally. It is mere pretence to pass thru a classical course without acquiring some definite knowledge of the classical languages. The study of Latin, for example, means the thoro and scientific study of that tongue, and after the necessary amount of foundation work it means passing on to the study of the literature written in that language, the study of the relation of that literature to other world literatures, the study of the history and genius of the Roman people, the study of the position of this people in the history of civilization and their contribution to modern times.

As purported by the resolution, the study of Latin does not mean skimming thru books about Latin, as tho one learned to handle tools by reading about them, or as tho one learned the processes by which an equation is solved by skipping all the intermediate steps, even the knowledge of the multiplication table or the sum of two and two, and turned lazily and conveniently to some one of the numerous keys prepared for student—and teacher—alike, and copied down the correct answer. Language study offers numerous equations to be solved every day. They are not expressed in figures, but they are expressed in letters, and more often in words. They are to be solved at every moment and almost unconsciously, and, as familiarity advances, these equations are solved accurately and rapidly. Persons who prate about the impracticality of linguistic studies as a disciplinary training do not know the mathematical side of these studies. Now, all of this strengthening and basic work is lost if students do not train the eye, the ear, and the analytical and reasoning faculties by genuine application until a facility has been acquired, but instead, leap over all the necessary and intermediate steps by mounting at once thru some artificial device to "a contemplation of literature thru a cheap and literal translation." The fool says, "I shall not learn the multiplication table; I have one in my pocket, always handy and accurate. The humbug says, "I want a diploma written in a language I cannot read." The writer believes that there is no cause for defending a resolution which does not sanction shams, and underhand or sleight-of-hand methods of procedure. The student should make use of all real helps. That only is a help to him which teaches him to help himself. The only real help for a college student in the acquisition of language is industry, persistent effort, determination. Some will reach a high degree of proficiency, some only a moderate degree, and some will fail. It is so in all subjects. Don't expect to level off the points of difficulty and obstruction by a uniform method of riding over all the eminences and obstacles, by any sham device which makes the subject equally smooth traveling for all alike!

Changes in Spelling.

It will be interesting in view of proposed changes in the spelling of certain words to look over changes that have been made in past years. The stubbornness of some who insist that not an iota shall be left out, not a variation made, no matter if it would ease the burden on a young child's back, recalls the fierce conflict that took place over the changes proposed by Noah Webster about seventy years ago. Among other changes he proposed that in the then used form "Saviour" the *u* be omitted. In some schools the cry at once arose that this was irreverence and children were forbidden by their parents to drop the *u*. So determined was the opposition that Webster in his dictionary gives both ways of spelling the word.

We note some of the changes that were proposed and have been adopted.

1. Termination in "our" changed to "or," as favor, honor, &c.

2. Terminations in "ck" to be changed to "c," as music, havoc, etc., to be retained, however, in monosyllables and their compounds, as stick, candlestick, &c.

3. Terminations in "re" to be changed to "er," as center, meter. Before this some hundreds of words had been already changed, as cider, chamber, &c. Webster proposed adding about twenty more to the list.

4. Not doubling the final consonant in words not accented on last syllable when "ing," "ed," "er," are added. In some fifty words ending in *l*, as traveler, this rule had been violated. This established a most important rule.

5. Distinguishing between verbs in "ize" and "ise." Words from the Greek to use a *z*, as baptize, &c.; from the French to use an *s*, as advise, advertise, &c.

6. Dropping the *e* in "able" when it is added to words ending in a silent *e*, as blamable; except after *c* or *g*, as noticeable.

7. Compounds of words ending in *ll* retain the double *l*, as befall, befalling.

8. Defense, offense, and pretense, formerly spelled with a *c*, to be spelled with an *s* because the derivatives employ an *s*, as defense, defensive. Several other words had previous to this had the *c* changed to an *s*, as expense.

9. Foretell, distill, instill, fulfill retain the *ll*; there had been a practice of leaving off an *l*; but as there must be a double *l* in foretelling Webster insisted on a double *l* in foretell.

10. Connection, etc. Here there had been a practice of spelling the word "connecion, but Webster insisted it should follow the spelling of the verb connect.

11. Derivatives of dull, shall, will, full, these to retain the *ll*, as dullness; there was a practice among writers of writing it dullness, etc.

12. Derivatives of villain; these to retain the *i*, as villainy. Some writers omitted the *i*.

13. Mould and moult to drop the *u* as had been done in gold, bold, &c. (The proper name still retains the *u*, as Gould.)

14. In certain words of one syllable, as doe, foe, woe, &c., the *e* should be retained; the practice had come in of spelling "woe" without the *e*.

15. Practice (verb) had been spelled with an *s*. Webster insisted that it should be spelled like notice and all similar words not accented on last syllable.

These changes were nowhere more stubbornly resisted than in the school-rooms of those days. Little did the pedagogues care for simplifying the language and bringing it under rules; for that matter they would have preferred to have no rules, but to have each word learned by itself; it would make the pupils study the harder.

These changes have been made in spite of the pedagogues; others are now needed. The language is a hard one to learn even for Americans. Let us take all the difficulties possible out of the way of the children.

These are the days when millions are to be spent on good roads; men are now employed to walk along the im-

proved roads and with a rake remove pebbles as large as a robin's egg so as to ease the labor of the horse drawing a heavy load. In a similar way humane teachers are asking that the obstructions in the child's path thru the forms of our words be removed. "Make straight the path of the child."

The Way They Do.

While sitting beside the desk of a busy publisher, in August, a letter was laid on his desk by a clerk; he glanced over it and said, "Do you have any such letters as this?" It was from a principal of a school in Blanktown and read as follows:

"I have been appointed principal of the school here and think it will be well for you to send me samples of your books which I will show to the school board." Then followed a list of the books wanted.

"This list will amount, retail price, to about \$14; he seems to look upon this house as a missionary station. I suppose we get about one such request a day; in a year it would demand that we give away books to the amount of three or four thousand dollars.

"Probably he wrote a similar letter to a dozen other publishers. Yes, we get letters of that kind. A county superintendent wrote to us for twenty-nine books, upon being elected; they were on pedagogy, methods, principles, and history of education, in fact, covered the whole field. He said that he would put them on his table and that teachers who came to be examined would see them—leaving us to infer that a brisk trade would spring up.

"We send out but few books now.

"The publishers should unite and not send a single one unless paid for. We occasionally want a text-book and when it is sent we compensate by a review; this is well-known to the publishers.

"We have been taking one at a time by the old method of "exchanging out" books. A clergyman came to us at one time and asked if we would 'exchange out,' book for book; we assented, and he brought in a great lot of arithmetics, readers, etc. Some of these must have reposed in garrets for many years; one arithmetic was Daball's, I remember. Well, he had his exchanges put up in a box; we supposed he would use them in the school over which he presided, but lo! behold the box came back one day from another publisher! It had not been opened. This publisher sent it to go towards balancing accounts. He had sold them outright to this man.

"That showed great business ability.

"That was the last of our 'exchanging out' books; that plan is now given up by all.

"The publishers should not give away their books; it has a demoralizing tendency; it causes teachers and school boards to think that books cost nothing.

"It would be better if all would adopt the plan. As it is we give away very few now."



These days of strikes in and out of school show plainly that there is a lack of reverence for law. Think of boys and girls proposing to make rules for the conduct of the schools, as has been the case in Chicago! What would Washington have thought of the outrages in the anthracite region? An officer of a missionary board lately remarked upon our interference with the treatment of Christians in Turkey: "The sultan might retort upon us! 'Those that live in glass houses should not throw stones,' if he ever heard the proverb, for he cannot but wonder why we allow such occurrences."

Hear the words of Washington. In writing to Henry Lee in Congress he says: "You talk, my good sir, of employing influence to appease the present tumults in Massachusetts. I know not where that influence is to be found, or, if attainable, that it would be a proper remedy for the disorders. Influence is no government. Let us have one by which our lives, liberties, and properties will be secured, or let us know the worst at once."

Letters.

Another Word on Spelling.

The report of the special committee of the New York State Teachers' Association on the school preparation for business life only confirms my own personal investigation in reference to the one subject of spelling. Still, the fact that the spelling of our pupils is better than formerly does not prove that educators are doing all that can be done to make our school spelling the best that it can be, even in the time now given to the subject.

From a great many tests given to high school, grammar school, and intermediate grade pupils, I find, in almost every case, the same condition. Rarely will a class be found who will not attain a fair average on a general list of words taken from the spelling-book, or from a list upon which they have been drilled, yet the same class will rarely attain even a fair standing, as a class, upon a carefully selected list of the common words, as: lose, accuracy, valleys, separately, tariff, college.

These tests have convinced me that there is more need of attention to these common words that our pupils are misspelling daily in their written work. If each teacher should keep a list of the words misspelled by his pupils in all written work, provided that there is a proper amount of written work, and should give proper attention to the spelling of these words, there would soon be little cause for complaint as to poor spelling.

Teachers still waste much time in teaching useless things. In spelling, time is wasted by giving attention to words that not one out of one hundred will ever have occasion to spell once in a life-time. Fully one-half of the words of any spelling-book with which I am familiar come under this head. The time given to the spelling of these words would be better used in learning their uses and meanings. A plan whereby each teacher, even in the high school, or special lines of work, gives a few minutes, occasionally, to a drill upon a special list of words pertaining to his subject, or subjects, and to the words misspelled on tests and general written work, has worked admirably in certain schools with which I am familiar. This plan, with proper emphasis to the syllabification of words, has accomplished within a few months and with comparatively little effort, such results as have raised the general school spelling at least twenty per cent.

Many of my inquiries, in reference to spelling, have been made of business and professional men, who now have children in schools. Many of these parents have put their children to spelling tests and have reported generally very favorably upon the present results. The only criticism from these parents worth noting is that not enough emphasis is given to syllables. Some go so far as to think that each syllable should be spelled, pro-

nounced, and then combined with the preceding part of the word, as: i n (in) t e r (ter) (inter) e s t (est) (interest) i n g (ing) (interesting). I think that at least the words should be pronounced by the pupil, first, naturally, and then by syllable, and then spelled, making breaks at the syllables in all oral spelling. There needs to be some oral spelling in order to get pronunciation, sound-blend, and syllabification clearly in mind. This is obtained where pupils spell orally for the purpose of correcting papers after the words have been written from dictation.

In short, my experience and investigations in the subject of spelling show, at least, three clearly defined needs. (1) More practical and rational list of words for study. These must, necessarily, be in part made up by each teacher. (2) More attention to the sound-blend of letters, with the syllable as the unit. Much attention in all spelling to the syllables of words will help in this matter. (3) Attention to spelling in every class and by each teacher, whether a regular teacher or a special teacher.

North Plainfield, N. J.

H. J. WIGHTMAN.



Supt. G. A. Stuart, of New Britian, Conn. President of the New England Association of School Superintendents, 1901-2.

Co-Education Again.

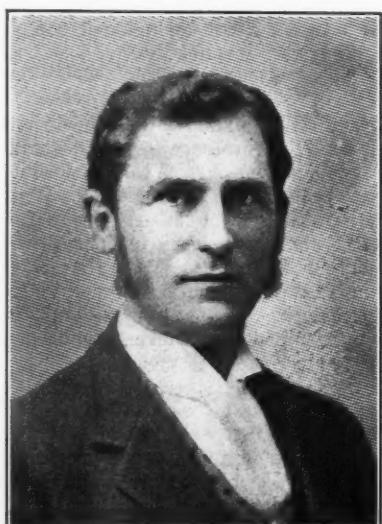
What pendulumish people educators are, tho they are not more so, perhaps, than other human beings or classes. We must zig-zag to get ahead. Perhaps progress in a straight line would not be true progress. It would imply an application of artificial forces to growth which would be incompatible with freedom and health.

One would have supposed five or ten years ago that co-education had won its place to permanent recognition, except in old institutions where the indurations of the ages had made modifications impossible. But when Chicago university backslides from her ideals in this matter one sees the "zag" that follows most "zigs." And when THE JOURNAL wabbles and practically falls from grace, as it did in a late editorial, it looks as if the track were an oblique backward instead of an oblique forward.

To my mind, there is no advantage which accrues to young men by reason of their association in college life which does not more truly follow from the association of young men and women, and there is no evil which results from their association which is not aggravated by their separation.

What an awful impression a drunken man makes in a prohibition town, and the philosophers (?) interpret it as an effect of which prohibition alone is the cause. With similar logic the evils of mixed schools are traced directly and with hysterical solemnity to co-education. When prejudice argues it generally parades a *post hoc* for a *propter hoc* and those who wish an argument where they do not care for a reason join the parade.

Those familiar with college life know that even when boys and girls are separated practices prevail which are



Dr. Edwin N. Brown, Supt.-elect Dayton, Ohio.

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to be regretted, which practices the presence of sisters and brothers tend to mitigate, and, in some cases, have abolished. Some boys may be made worse by the presence of girls, but they are generally degenerates. Some girls may be made worse by the presence of boys, but they are exceptions. In both cases the deterioration would be much more likely to occur at home, where they are without special restraint, than in college, where they are under the most wholesome influence supposed to be. If boys or girls, men or women, wish to be bad they will find opportunities wherever they are, but more easily at home than at college. If boys or girls, men or women, wish to become stronger, more self-reliant, more sturdy in moral character, they have a better and healthier stimulus to this end in the environment of a co-educational institution than in a separate institution.

Bain, in his "Science of Education," places the stamp of authority and science on the doctrine that the feelings interfere with thinking. Well, they do if they do, but they energize and sanctify thinking just as truly. It de-

pends entirely upon the power of the will to direct those feelings. I have seen many a pair of genuine lovers do better class work, attain higher standing, morally and intellectually, because they were in love and recited in the same class. I do not deny I have seen the other effect also.

Considerable experience in this matter has led me to the conclusion that the most strenuous opposition to co-education comes from mothers (and so, of course, from fathers), who fear that the course of nature as it is likely to flow in a co-educational institution will interfere with the course of artificial social plans for the disposition of marriageable sons and daughters. Well, Cupid always was prankish, but too much interference with him never has worked well. Besides, I can recall more foolish marriages of boys and girls in "separate" colleges than in "mixed."

P. H. N.

Pittsburg, Nov. 18, 1902.

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N. E. A. Convention at Boston, July 6 to 10, 1903.

Official Announcements.

Instead of eight general sessions, as in former years (six at Minneapolis), but five such sessions will be held at the Boston convention, and they will occur on the evenings of Monday to Friday, inclusive. The forenoons of Tuesday to Friday, inclusive, will be assigned to department meetings. No sessions will be held in the afternoons, but, instead, a large number of N. E. A. excursions at special rates, under the conduct of competent guides, will be planned for each afternoon to enable the members to visit with the greatest facility and profit the various points of interest in and about Boston.

The Executive Committee at its recent meeting reaffirmed the past policy of the Association that in arranging for transportation to the annual convention no "Official Routes" shall be selected or announced which will tend in any way to divert business from the legitimate territory of any line to another line.

The policy referred to, which applies alike to the initial lines and to the lines terminal in the convention city, recognizes that wherever several lines have equal claims on the business of any state or district they have equal claims on the aid and co-operation of the officially appointed director or manager.

This does not prevent the formation of parties to go by certain specified routes, providing all lines in interest are regarded as alike "official" and are given equal opportunities and official assistance in organizing such parties.

No legitimate advantages can come to the work of any director or manager by the adoption for a state or district of an "Official Route," while the Association would be seriously embarrassed in its relations with the transportation lines by such action.

No other convention body has, in recent years, been able to secure such favorable rates, routes, and ticket conditions. These favors are granted largely in consid-

eration of the good faith and co-operation which have uniformly been shown by the officers of the Association in protecting alike the interest of all lines. The various passenger associations recognize that the conventions of the N. E. A. have never caused demoralization of rates, have been attended by little or no ticket scalping, and have been free from other convention abuses of the special concessions, which invariably follow the policy of selecting "Official Routes." The Association cannot afford to be placed in any other attitude, either for its own interests or as a matter of fair dealing and of justice to the transportation companies.

The state directors are especially charged with preserving in their respective districts the general policy of the Association in these matters, and they should carefully instruct their assistants in the details of that policy.

The sessions of the convention will all be held in the vicinity of Copley Square.

CHARLES W. ELIOT, president, Cambridge, Mass.

IRWIN SHEPARD, secretary, Winona, Minn.

A meeting of the presidents of the eighteen departments of the Association will be held in Boston about January 1 for the purpose of conferring with each other and with President Eliot as to the programs for the Boston Convention. The prominence which will be given to the department programs is due to a conviction on the part of the President and Executive Committee that the most important work of the Association may be done in the department meetings if due care is taken in organizing the programs for these meetings.

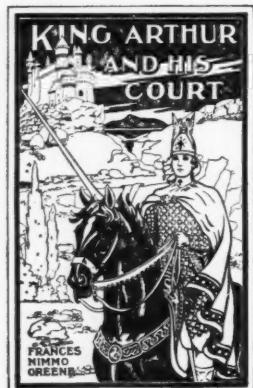
The usual rates and ticket conditions have been granted by the New England Passenger Association, viz., one fare for the round trip, plus the membership fee, with provision for extension of tickets for return until September 1 on the deposit plan. Connecting associations will, without doubt, take concurrent action.

IRWIN SHEPARD, secretary.

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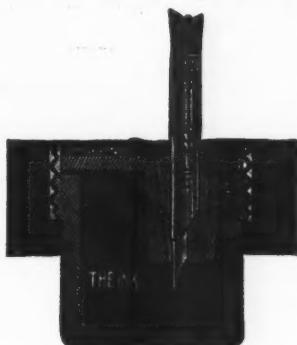
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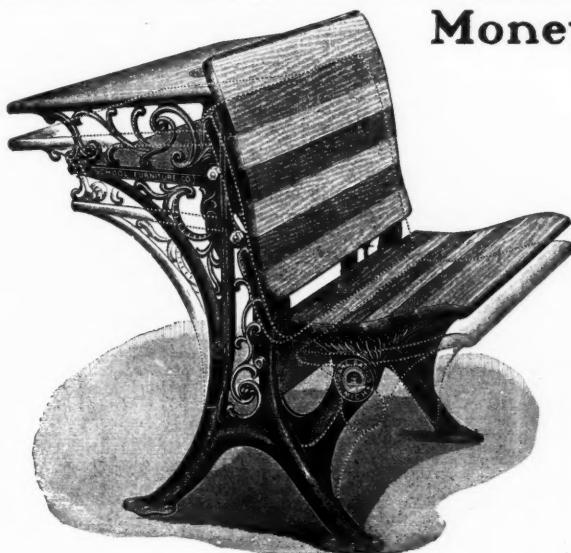
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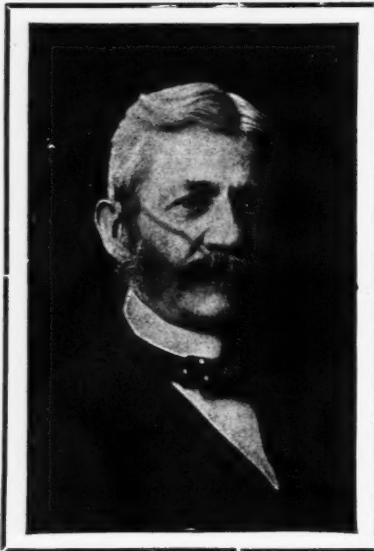
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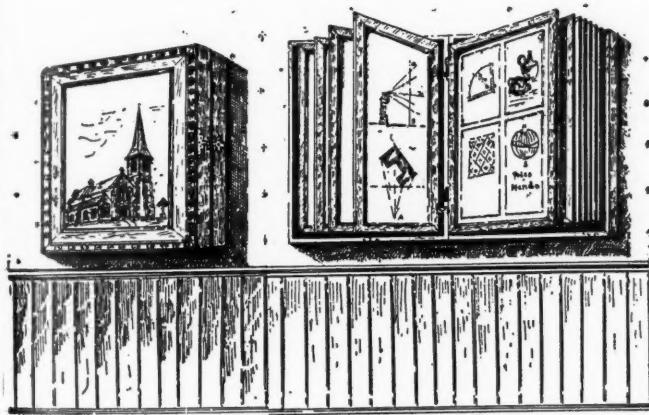
From the Report of the Committee on Text-Books—Included in the Latest Report of the Board of Education, Washington, D. C.

Numerous readers were furnished for examination, many of them most attractive and of a high literary order. After a careful consideration your committee selected the first, second, third, fourth, and fifth books of Judson and Bender's Graded Literature Readers, published by Maynard, Merrill & Co., which we considered superior to all others and best adapted for our purpose.

In selecting the above books, we postponed our final determination until able to secure the opinion and advice of the superintendent, the assistant superintendents, and the supervising principals. It was most gratifying to your committee to find that the selections made by them met with the unanimous approval of the officers of the schools. We may add, with some pardonable pride, that since our action the books named have been introduced into the schools of many of the larger cities of our country, the wisdom of our selection having thus received a quasi indorsement.

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The newly established social settlement in the Speyer experimental school building has already accommodated more than 130 boys and many more have been temporarily turned away owing to the limited facilities at present available.

The central board of education has approved a site on Lawrence street, Long Island City, for a new school to relieve the congestion at Public School 6. This action has aroused vigorous protest among the residents of the locality. Petitions and resolutions of various kinds against this site have appeared. The petitioners state that the place selected is in the midst of a swamp, there was no demand for a school there, and that good land could be procured for half the price asked for the proposed lot.

Work has been stopped on the new public school that is being erected at Henry and Rapelye streets, Brooklyn. The entire tier of twelve columns, which were to serve as the base of the structure, has been condemned and the work cannot proceed until new columns are brought from the foundry.

A movement is on foot to attempt to establish experimental classes for defective children. A partial computation shows that there are approximately 8,500 children in the New York schools that need special training which they cannot receive in the regular classes. The idea of Commissioner Mack, who is behind this movement, is to have special classes with fifteen to twenty pupils in them. These children will be trained after the most scientific methods and everything done to bring them up to the normal.

The university council, of Columbia university, has granted a fellowship in education at Teachers college to Prof. Harvey Thistleton Mark, master of method in Owen's college, Manchester, England, and author of the excellent parliamentary reports on Moral Education in American Schools, recently published.

The school board of Staten Island has decided to erect a school building in Barrett Park for the accommodation of School No. 30, now located in a rented building in Prohibition Park.

Supt. Darwin L. Bardwell was tendered a farewell reception by the teachers and board of education of Binghamton, N. Y., on Nov. 7. Several valuable testimonials presented to him on this occasion assured him of the esteem in which he is held by both the teachers and citizens.

Commander G. C. Harris, U. S. N., retired, has been nominated as superintendent of the nautical school.

FREIGHTON, L. I.—The pupils of the schools have acquired marked proficiency in the fire drill exercises. At a recent test every person in the school vacated the building in one minute and twenty seconds, breaking all previous records.

The regular meeting of the Society of Practical School Problems will be held at the hall of the board of education on Saturday, December 13, at 10.30 A. M. Dr. Nicholas Murray Butler, president of Columbia university, will deliver an address on "The Teachers' Reading."

Plans are being made to hold a commercial educational convention under the auspices of the University of Michigan. It is hoped to secure the co-operation of the professors of economics and higher commercial education in all the large universities of the country. The object of such a convention is to enlighten the industrial and commercial public, and to co-operate in methods of teaching and scope of the work.

JAMAICA, L. I.—The school building at Springfield is greatly overcrowded at present. Principal James M. Whitnack has made an earnest appeal for more room and his petition will probably be granted. Now twenty-one sixth grade pupils are huddled in a room 10x24 feet in size, and the graduating class is being instructed in an old store-room, 11x13 feet.

New York Teachers' Club House

The committee of one hundred of the New York Teachers' Association has issued a circular letter embodying its views and plans for the proposed teachers' club-house.

After reviewing the history of the movement the letter considers the advantages of the proposed building. They are as follows:

1. Such an institution will bind the teachers together in social and professional fellowship as nothing else can.

2. It will at once greatly increase the prestige and influence of the teachers with the community, and their influence and usefulness in the cause of education.

3. It will enable them to receive under proper auspices the great educational lights who visit the city; to receive and confer with representative men or committees from other professional or lay bodies for conference or interchange of ideas upon matters of general educational interest.

4. It will be in the best sense of the term a teachers' exchange, the center of educational discussion and activity.

5. It will contain a pedagogical and general library such as will fully meet all professional requirements.

6. It will have a book room where principals and teachers can at their leisure examine and select text-books for their classes.

7. It will contain a large hall which will always be at the disposal of lecturers for the general body or for special courses, meetings, and entertainments generally.

8. It will have committee rooms and reading rooms where representatives of the various branches and grades of the service can meet and formulate plans for their special interest or welfare, before bringing them to the general body for endorsement and advocacy.

9. It will contain such other club features as the committee may consider suitable or necessary for the comfort and interest of the men and women of the profession.

The plans of the building provide for a ground floor containing offices and an auditorium, a mezzanine floor, and a second and third floor providing dining and club rooms, a library and various committee rooms. Above this there may be six floors divided into bachelor apartments.

The cost of such a building will be from \$200,000 to \$300,000, and to maintain and run it will cost \$15,000 to \$20,000 per annum.

The means of raising this sum are not yet definitely settled. Already the association has \$16,000 in its treasury for this purpose, and many teachers have offered generous subscriptions.

No Direct Delivery.

There was a movement on foot sometime since on the part of the committee of supplies of the board of education to make the book publishers deliver their books directly to the schools instead of having them go thru the supply department. This naturally met with opposition from the publishers and also from many principals. The plan has eventually been given up owing to the certainty that incalculable confusion would follow its adoption.

New Commissioners.

Mayor Low has announced the appointment of the following school commissioners for the term of five years from January 1, next: Charles C. Burlingham, A. Leo Everett, Frank T. Cunnion, Jacob W. Mack, and Edward D. O'Brien, all of Manhattan; Frederick W. Jackson, of the Bronx; Albert G. McDonald, John Greene, and George D. Hamlin, of Brooklyn; and George E. Payne, of Queens.

Strange Legal Decision.

Justice Bischoff, of the supreme court, has decided that the name of Mrs. Anna E. Perham, who has not taught in the public schools for many years, must be restored to the eligible list of applicants for principalships. Mrs. Perham's first license was granted in 1857. After teaching for three years she became a principal. Shortly after this promotion she married and did not teach, except in a night school, during 1869, until three years ago, when she became a substitute teacher. In 1899 she applied for a regular position but this was refused. Last July she applied to have her name placed on the eligible list. The superintendent stated that Mrs. Perham had failed in several examinations, and besides a rule of the board provided that a license issued before 1898, and unused for five years should become invalid unless the holder was re-examined.

Justice Bischoff, in his decision, said: "By virtue of the license issued to her she is entitled to demand that her name be placed on the eligible list, and her application for a peremptory writ of mandamus is therefore granted."

The Teaching of German.

The *Staats Zeitung*, in an editorial on German in the public schools, praises Dr. Maxwell for his efforts to secure the teaching of that language in the elementary schools. The editorial then states that the question of whether German should be taught in every school in New York, irrespective of locality, must be answered by the Germans in the negative. The reason for this is that there

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are various populous colonies of foreigners in the city to whom the German language is more distasteful than any other, because in their native country the dislike of everything German has been systematically kept alive for decades. The teaching of German in schools attended by such pupils would be absurd.

Retirements.

The board of education has retired the following principals upon their own application: Mary E. Perley, P. S. 76; Rose M. O'Neil, P. S. 23; Frances A. Smith, P. S. 172, and Mrs. Mary A. Smart, P. S. 82, Brooklyn. These retirements are to take effect at various dates.

The retirement of the following teachers has also been granted on their own application: J. P. Cloherty, P. S. 79; Bertha Leopold, P. S. 2; Mary McLain, P. S. 21; Julia Murphy, P. S. 56; Martha F. Woodall, P. S. 155; Minnie E. Spalding, P. S. 12; Alice Sterling, P. S. 79. These are in Manhattan and the Bronx. In Brooklyn the retirements are Sarah G. Watson, P. S. 28, and Cecelia H. Davies, P. S. 16.

An Educational Museum.

Teachers college has a museum which, altho only the growth of a year, has yet accomplished much of its purpose, to serve as a miniature model for museums in schools, colleges, and universities. This is particularly shown in the collections of school furniture. The cases in which the various articles of interest are deposited are, and were intended to be, models for cases in other museums. Their good points have been appreciated and they have been copied by various other institutions.

Again the museum shows various samples of school seats and desks and while this collection is not as complete as it is intended to be there are samples of the best work, such as desks of the Grand Rapids School Furniture Company and of the Haney School Furniture Company. The museum has the nucleus of a collection of various kinds of picture frame moldings. There are also copies of every kind of blanks used in the schools of the various cities of the country, representing every grade from the kindergarten to the high school.

Besides the equipment itself Mr. George Sawyer Kellogg, the curator of the museum, is engaged in gathering pictures and plans of the buildings themselves, from the earliest types until the present. This is believed to be the first collection of this kind ever attempted in the country. There are photographs of buildings erected in the early forties until the present, which is represented by an almost complete set of New York public school buildings. Thus the museum tries to show the growth and ideal of the school building, and, so far as the collection has progressed, of the school equipment.

Besides these exhibits there are several collections of general interest. Perhaps the most attractive is the collection of old and valuable works on mathematics with autograph letters of many prominent mathematicians loaned by Dr. David Eugene Smith.

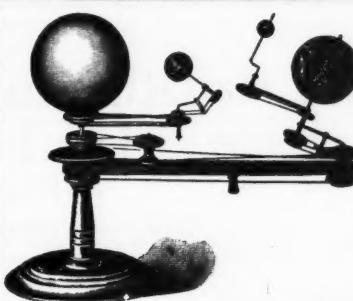
A curious feature of another case is an example of educational equipment of other lands, represented by a Russian counting machine and a pile of bones which are used for counters in Corea.

The museum, as a whole, will be found extremely interesting to teachers, and the curator will be ready to aid with suggestions as to how a school should be built or equipped or to answer questions on anything relating to the collections.

An effort is being made to correlate the collections with the literature of each subject.

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Recent Deaths.

The Rev. S. L. Hamilton, for many years connected with the University of Southern California, died at his home in Los Angeles, on November 27.

Pres. William S. Wands, of the Newburg, N. Y., board of education, who died, November 27, at the age of sixty-three, was a native of New Brunswick, Canada.

Prin. John W. Barris, of P. S. 15, Brooklyn, died early last week.

Prof. Otto Sieman, a lecturer in Concordia German Lutheran college, for twenty-three years, committed suicide on November 23. Overwork is supposed to have been the cause. He had attended Columbia university and graduated from Berlin university.

A handsome bronze tablet in memory of Hamilton J. Castner has been placed in Havemeyer Hall at Columbia university. Dr. Castner was graduated at Columbia in 1878. He achieved great success in numerous inventions in electrochemistry. He died while engaged in researches in the field of industrial chemistry.

Frederic Tudor, who has left his mark upon the heating apparatus of this country and of Europe, recently died in Boston. Mr. Tudor's devices formed the basis of a considerable number of American, French, and German systems of heating. Most of these are still in use and several of his systems are widely known. He was the first to introduce low pressure steam heating with very small pipes and a regulating valve on the radiator.

Mr. Joseph M. Cushing, of the firm of Cushing & Company, of Baltimore, died suddenly on November 23.

President S. T. Coy, of Coy, Hunt & Company, of 72 Duane St., New York, died at Bellows Falls Vermont, on Monday, Nov. 3.

Prof. Henry Mitchell, of Boston, a prominent scientist and a member of the National Academy of Arts and Sciences, died on December 1. Altho not a graduate of any college, he was the holder of an honorary degree from Harvard university.

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The Hopeful South.

The appreciation of the value of better schools is rapidly spreading in certain parts of the South. This makes the situation extremely hopeful and already the amount of unselfish and faithful work being done by the Southern teachers is very great and it is constantly increasing.

The governor of Virginia represents this appreciative attitude toward the schools. In his messages he has laid down two essentials for the schools of his state. One is that in the thinly settled parts it is better to have one good school than three poor ones; the other is that the schooling shall as far as possible fit the pupils for the work that they will be called upon to do.

These involve three things. One is separation of the school administration from politics. Another is that a better class of teachers shall be employed, and the schools kept open for a longer time. The third is that the pupils shall be trained not to a discontent with their surroundings and desire to escape them, but to an understanding of country conditions and the desire and ability to deal with and improve them. In other words, the best schooling must relate definitely to the life the people are to live in their own homes.

James B. Balser, secretary of the faculty of the University of Virginia for twenty years, died at Charlottesville, Virginia, on November 21.

The newly-issued catalog of the University of Tennessee shows that a real university is being developed in that state. All the departments show an increase in attendance this year, the total enrollment being 618.

A National Teachers' Union.

The officials of the Chicago Teachers' Association favor the formation of a national union of teachers to be affiliated with the American Federation of Labor. The idea is to have in every city an organization of teachers, and each organization is to be allied to the national federation. During the convention of the National Educational Association at Minneapolis, in July, a national federation gained a foothold, but the teachers came in as individuals not as organizations.

Lawbreakers.

A number of policemen were recently summoned to a Chicago school to quell an incipient riot among a number of refractory boys. The boys refused to enter the building or allow any one else to do so. The cause of the outbreak is attributed to the general strike idea existing among pupils of the public schools.

Lifting the Country Teacher.

The Middlesex county, N. J., school board directors have passed a few very sensible resolutions that ought to help remove some of the traditional burdens of the country school teacher. This is what they say:

Resolved, That it is the sense of this body that successful teachers should be paid a salary of not less than \$40 per month for services rendered, in view of increased expenses for the necessities of life.

Resolved, That in the opinion of this board teachers should not be expected, or requested to sweep and dust school-rooms and build fires unless such a provision appears in the written contract.

Resolved, That water pails are dangerous, and that it is the sense of this board that they should be discontinued in school-rooms.

Los Angeles Sets an Example.

At an election held on October 29, voters of Los Angeles decided to issue bonds to obtain money to construct a large number of new school buildings, including a polytechnic high school. The Los An-

geles *Express* speaking editorially on the result of this election says, "This means a full day's tuition for every child of school age for years to come, that is unless the growth of the city should far outstrip present calculations. Congratulations are in order to the citizens of Los Angeles."

Several churches have permitted the board of education to use their meeting-rooms for classes. This was after the churches had refused a proposition of the board to lease these accommodations for a nominal rental of \$1.00 on the ground that they did not wish the board to arbitrarily control any of their property.

London School Activity.

Public educational institutions within the county of London, conduct sixty-eight special evening schools most of them being under the charge of the Technical Education Board of the London County Council. Besides these schools there are the regular evening classes of the school board of London. These special schools conduct classes in a variety of subjects such as are not attempted in any of the schools of this country. In general science we find, agriculture, astronomy, biology, mechanics, metallurgy, building construction, hygiene, geology, mathematics, chemistry, physics, zoology, and sanitary science.

Under the head of special art industries there are classes in engraving, diamond mounting, book-binding, heraldic painting, stained glass work, stone carving and wood engraving. Besides these there is night instruction in the various ordinary trades, as carpentry and masonry.

Princeton Plans.

Pres. Woodrow Wilson, of Princeton, desires to erect a law school, a practical electrical school, a museum of natural history, and biological laboratories. He estimates that \$12,500,000 is necessary to carry out these improvements.

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Indiana News Items.

A bill is to be introduced into the Indiana legislature to provide another normal school for the state. This proposition has the endorsement of all the city and county superintendents. The present normal school at Terre Haute is often overcrowded. Its capacity is 1,000 pupils and often the attendance reaches 1,200. The proposed bill will not provide a location for the new school, but it is understood that Anderson is its probable situation.

Frank Irving, a school teacher of Winchester, Indiana, is charged with manslaughter. He told a pupil to leave the room and the boy being somewhat slow in his movements, the teacher pushed him outside. The boy fell, sustaining fatal injuries.

The State Association of School Boards of Indiana held its annual session at Indianapolis on November 19 and 20. Charles W. Moores, of the Indianapolis school board, addressed the association on the present school law of the state. He sharply arraigned the present system with its poorly heated and lighted buildings and badly paid teachers. He advocated three immediate reforms: better pay for teachers, longer school terms in rural districts, and better equipped buildings.

A. M. Sweeny, president of the association, discussed methods of selecting teachers, urging that politics and religion should not be permitted to interfere with the appointment of capable teachers.

Wilson Blackburn, of Mt. Vernon, read a paper on "School Sanitation," in which he gave a careful description of the proper location and construction of a school building.

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High School Library List.

State Supt. L. D. Harvey, of Wisconsin, has issued a list of 1600 books suitable for high school libraries. This is a most carefully classified and annotated bibliography of the best books in every line of work which can be of use in a high school. History, economics, the sciences, pedagogy, and literature are the various main divisions of the work. A library containing all the books mentioned in this list would be well equipped for any sort of study as the books have been chosen with keen appreciation of the relative values of the books in the

branches of learning to which they relate.

Besides containing a list of books the volume is supplied with hints to teachers on how to select books, which greatly enhance its usefulness to the schools.

Wants Text-Book Law Changed.

At the meeting of the Indiana Trustees' Association held in Indianapolis, on November 19 and 20, John W. Gibney read a paper on "Needed legislation for Indiana schools," in which he criticised the text-book law and declared that it is only

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beneficial to the book publishers. He advocated a free text-book law.

Supt. E. A. Hutchins, of Hamilton county, advocated making attendance at the township institute compulsory.

Curfew for Teachers.

There is a strong movement among school boards in the West to prevent teachers attending entertainments during the week. In some places this is only discouraged while in others it is actually forbidden. One school board goes so far as to forbid teachers being out after eleven except on Friday and Saturday nights. These nights are excepted as there are no sessions on the next day.

Higher Education Notes.

In a contest with sophomores two members of the freshman class of Heidelberg university, Tiffin, Ohio, were shot on November 20. A crowd of freshmen tried to steal a team belonging to some sophomores. They were caught and a shotgun was used on them with the result that two were badly hurt.

IOWA CITY, IA.—The worst class-fight in the history of the State university occurred on November 21, and raged all night. Several students were injured; property to the extent of \$700 was destroyed, and the local police force was beaten.

The fight started at a freshman dance by the sophomores bombarding the hall with missiles, including eggs; the doors were broken down and much costly furniture was destroyed. Policemen tried to interfere in the struggle but were driven off by medical students with the aid of revolvers. Several shots were fired but it is believed that no one was hit. Several students were severely hurt by clubs and missiles.

The faculty will undoubtedly investigate.

Boys Threaten to Strike.

Because the board of education has excluded fraternities from school life the students of the Binghamton high school have organized a boycott against of the faculty of the school and the board. Complaint has been made that the students give too much time to social functions and too little to their studies. The board of education took this matter up and published an order which amounted to an abolition of the fraternities. The pupils are now prepared to walk out of school unless the order is rescinded.

Spelling in Universities.

The standard of spelling at ten seats of learning, according to the Chicago Evening Post, is as follows: Of bad spellers Princeton has a percentage of ten; University of Minnesota, thirty; University of Illinois, twenty; the spelling standard at Cornell is "high"; at Columbia's Schools of Applied Science, "atrocious"; at the Massachusetts Institute of Technology the percentage of bad spellers is "large"; at Brown University it is not so large as in the entering class of Northwestern; at Yale the standard is "high," and at Wesleyan and the University of Michigan it is "fair."

More Room Needed.

Northwestern university is looking about for some expedient to meet the attendance problem, for the university has reached the limits of its present capacity. Unless fees are raised or an additional endowment secured the attendance will have to be checked. The increase in registration over a year ago is something over twenty per cent. in all the departments.

Winchester's New School.

The contract for a new \$110,000 high school at Winchester, Mass., has been recently awarded. It will be a model

building with accommodations for about 450 pupils.

A kitchen and lunch room will occupy the basement together with a large and well-lighted gymnasium. The first floor is to be given over to offices and classrooms, but on the upper floors will be rooms for physical and chemical laboratories, and art and commercial rooms. A reading room and a large library are among the progressive features. The building is to be heated and ventilated by the fan system and lighted by electricity.

Indian Education.

The annual report of Miss Estelle Reel, superintendent of Indian education, states that there has been a marked advance in industrial training in the schools under her charge. The course of study prescribed has materially assisted Indian youth in learning agriculture as a means of self-support, while the girls have benefited by the class-room curriculum, which fits them for the duties and responsibilities of the home. The report makes a plea for improved and better equipped day schools attended by both races. The enrollment in Indian schools for 1902 was 28,610. Miss Reel particularly refers to the gradual disappearance of the so-called "blanket Indian" and the general improvement in the conditions of the race.

Object to Indian Schools.

A number of Indian tribes in the West will try to persuade Congress to call a halt on the further extension of the non-reservation school system. The Santee, Sioux, and Omahas have petitioned the Nebraska delegation to get the secretary of the interior to make a ruling to allow them to send their children to the common district schools of the state. The head men declare that under the present system their children do not gain the independence and self-reliance that they should acquire, and if educated with

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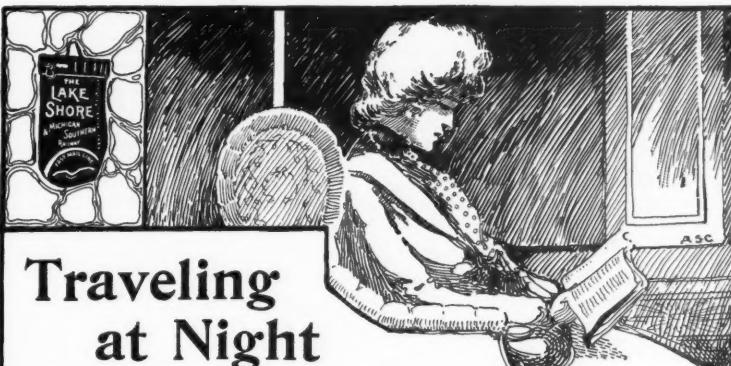
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white children the spirit of emulation inevitably would tend to spur them on and lead to better results than are now attained. The fact that Indian children are kept by themselves makes them feel that they are not the equals of white children

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"After suffering from catarrh of the head, throat, and stomach for several years, I heard of Stuart's Catarrh Tablets quite accidentally and like everything else I immediately bought a package and



was decidedly surprised at the immediate relief it afforded me and still more to find a complete cure after several weeks' use.

"I have a little son who sings in a boys' choir in one of our prominent churches, and he is greatly troubled with hoarseness and throat weakness, and on my return home from a trip I gave him a few of the tablets one Sunday morning when he had complained of hoarseness. He was delighted with their effect, removing all huskiness in a few minutes and making the voice clear and strong.

"As the tablets are very pleasant to the taste, I had no difficulty in persuading him to use them regularly.

"Our family physician told us they were an antiseptic preparation of undoubted merit and that he himself had no hesitation in using and recommending Stuart's Catarrh Tablets for any form of catarrh.

"I have since met many public speakers and professional singers who used them constantly. A prominent Detroit lawyer told me that Stuart's Catarrh Tablets kept his throat in fine shape during the most trying weather, and that he had long since discarded the use of cheap lozenges and troches on the advice of his physician; that they contained so much tolu, potash and opium as to render their use a danger to health.

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mentally, and so hinders their progress.

The white people living on the borders of the reservations, however, protest that the Indian children cannot keep up with the white children and are a clog to the schools.

The adoption of the practice of sending Indian children to public schools would do away with the reservation schools and considerably reduce the attendance at the non-reservation schools. The saving to the general government would be a large one, and it is not unlikely that the commissioner of Indian affairs and Secretary Hitchcock will favor a trial of the plan suggested.

Here and There.

LINCOLN, NEB.—Supt. C. H. Gordon has been appointed instructor in geology and geography in the University of Nebraska. Dr. Gordon retains his position at the head of the city schools and will, for the present, carry one course in petrology and during the spring semester one in geography, the latter designed especially for teachers or those having teaching in view. In addition to this work he will also, during the spring semester, repeat his course of lectures on school supervision and management given last year.

The Northeast Manual Training school of Philadelphia is giving its fifth annual series of lectures this winter. The purpose of the series is to place before the public the broader aims of culture of the school and to offer something enjoyable and instructive. The series includes lectures on Quebec, Tennyson, and "School Life in History."

Ensign William L. Varnum, U. S. N., has been appointed executive officer of the Massachusetts nautical training ship Enterprise. For the past four years Mr. Varnum has been on duty in the compass office of the bureau of equipment.

Brown university is to erect a memorial tower ninety feet high, twenty-five feet broad at the base, and containing a chime of bells to strike the hours for academic purposes. It will be called the Bajnottie Memorial Clock Tower.

Prof. G. C. Caldwell, the first professor appointed after Cornell was founded, has resigned as head of the chemistry department in the university.

Wesleyan university, Middletown, Conn., has received a gift of \$50,000 to equip an astronomical observatory.

Longmans, Green & Company are receiving favorable comments in connection with the last four additions to their English classics for high schools. They are Scott's "Lady of the Lake," edited by Prof. George Rice Carpenter, of Columbia university; Irving's "Life of Goldsmith," by Louis B. Semple, of the Brooklyn Commercial high school; Tennyson's "Idylls of a King," by Garrett and Lynette, and "Passing of Arthur, Launcelot, and Elaine" by Sophie C. Hart, of Wellesley college.

The importance of the Philippines is constantly being brought to our attention. Silver, Burdett & Company have in press a geography devoted exclusively to these new acquisitions of ours. It is the first book which gives a scientific geographical knowledge of these islands.

The Southwestern Kansas Teachers' Association met at Eldorado, Butler Co., Kansas, on November 28 and 29. Among the addresses were: "Algebra and the Common School Teacher," by Supt. R. F. Knight, of Wichita; "Nature and Culture Work in Relation to Reading in the Primary Department," by Miss Florence

Richardson, of Leon; "Story Telling," by George J. Landrum; "The Teaching of Latin in the High School," by Prof. Clifford P. Clark, of Fairmount college; "Social Co-operation of Teacher and Student," by T. C. Conklin, of Mulvane, and "The Mission of the County Normal Institute," by Prin. C. O. Smith, of Belle Plains. The president of the association was Supt. J. A. Ferrell, of Sedan.

At the South Central Missouri Teachers' Association held at Ava, Douglas County, November 27, 28 and 29. Prin. W. H. Lynch, of Mountain Grove academy spoke on his favorite subject, "The Newspaper in the Public School."

Meetings to Come.

The fourteenth semi-annual meeting of the New Jersey High School Teachers' Association will be held in the assembly room of the public library building of Newark, N. J., on December 5 and 6.

Among the speakers will be Pres. Woodrow Wilson, of Princeton university; Eugene R. Smith, of Montclair, on "High School Mathematics"; Prof. Paul H. Hanus, of Harvard university, on "The Qualifications and Training of High School Teachers and Principals," and C. J. Major, of Newton, on "State Supervision of High Schools."

Prin. I. W. Travell, of Plainfield, is president of the association, and Cornelius

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E. MacMullan, of South Orange, is the secretary.

The fourth annual conference of the Association of American Universities will be held at Columbia University on December 29, 30, and 31.

The eighteenth annual session of the American Historical Association will be held in Philadelphia on December 26, 27, 29, and 30. Capt. Alfred T. Mahan is president of the association. Among the addresses will be: "Economics and Social Progress," by Pres. Edwin R. A. Seligman, of the American Economic Association; "American Business Corporations Before 1789," by Judge Simeon E. Baldwin, of Connecticut; "American Constitutional Principles in the Constituent Assembly," by Prof. Henry E. Bourne, of Western Reserve University; "Antecedents of the Declaration of Independence," by Prof. James Sullivan, of the High School of Commerce, New York, and "A Neglected Point of View in American Colonial History," by Prof. William McDonald, of Brown University.

Miscellany.**The Christmas Dinner**

In spite of the fact that the word dyspepsia means literally bad cook, it will not be fair for many to lay the blame on the cook if they begin the Christmas dinner with little appetite and end it with distress or nausea. It may not be fair for any to do that—let us hope so for the sake of the cook! The disease dyspepsia indicates a bad stomach, that is a weak stomach, rather than a bad cook, and for a weak stomach there is nothing else equal to Hood's Sarsaparilla. It gives the stomach vigor and tone, cures dyspepsia, creates appetite, and makes eating the pleasure it should be.

Pennsylvania Railroad Company Will Issue Clerical Orders for 1903.

Pursuant to its usual custom, the Pennsylvania Railroad Company will issue clerical orders for the year 1903 to ordained clergymen having regular charge of churches located on or near its lines. Clergymen desiring such orders should make individual application for same on blanks furnished by the company through its agents. Applications should reach the general office of the company by December 21, so that orders may be mailed December 31 to all clergymen entitled to receive them.

Personally-Conducted Tours via Pennsylvania Railroad.

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The Pennsylvania Railroad Company announces the following personally-conducted tours for the season of 1902-1903:

California.—Two tours: No. 1 will leave New York, Philadelphia, and Harrisburg January 29; No. 2 will leave February 19, and will include Mardi Gras celebration at New Orleans.

Florida.—Three tours to Jacksonville will leave New York and Philadelphia February 3 and 17, and March 3. The first two admit of a stay of two weeks in the "Flowery State." Tickets for the third tour will be good to return by regular trains until May 31, 1903.

Old Point Comfort, Richmond, and Washington.—Four tours will leave New York and Philadelphia March 14 and 28, April 25, and May 9.

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Commencing yesterday the old ferry to North Weehawken, N. J., was abandoned as a ferry point, and the new station at West New York, N. J., was opened and the large ferryboat "Oswego" was placed in regular service on the West 42nd St. and West New York line. The new station is located about one-half mile north of the old Weehawken ferry.

A new time table also went into effect for the West 42nd St. and Weehawken Railroad ferry.

At the conference recently held between the representatives of the Trans-Siberian, the Chinese-Eastern, and the European Trans-Continental Lines rates of fare were agreed upon and the tickets were arranged for the trip from Paris to Pekin. Some of the difficulties which had to be overcome in making this ticket may be imagined when we learn that there are twenty-nine coupons in the ticket book, each of which represents a division of territory. At the conference fifteen copies of the New York Central's "Four-Track Series" No. 28, entitled "A New Map of Asia and the Chinese Empire as They are To-day," were laid on the table and used for this complicated piece of work. They were regarded as the best map of the Chinese empire obtainable. No higher compliment could be paid them. Copies of this map will be sent to any address on receipt of three two-cent stamps by George H. Daniels, General Passenger Agent, New York Central and Hudson River R. R., Grand Central Station, New York.

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